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A National Newspaper for Every Branch of the Industry

Automotive Daily News

CARS · SHOP EQUIPMENT · TRUCKS · AVIATION · PARTS · ACCESSORIES · TIRES

Vol. 10. No. 1274 | Entered as second-class matter Aug. 27, 1925, Post Office, N. Y., N. Y., Under Act of March 3, 1879 | NEW YORK, FRIDAY, AUGUST 15, 1930 | 10 Cents, $12 Per Year

AYERS SEES UPSWING IN BUSINESS

J. D. Mooney Sees Time Ripe To Rebuild Export Markets; Sees Depression Waning

Says American Exporters Face Real Struggle to Regain Friendship of Foreign Buyers

NEW YORK, Aug. 14.—The time for the intensive rebuilding or recultivation of overseas markets for American goods is at hand with the world having reached the bottom of the downward economic swing, in the opinion of James D. Mooney, vice-president of General Motors Corporation and president of General Motors Export Company, expressed as he sailed for Europe on the S. S. Europa Wednesday. Mr. Mooney will be in Europe until November.

"American exporters face the hardest task in the history of our overseas trade, which was to be expected in view of the economic and political factors at work during the past year," said Mr. Mooney. "The establishment of our enormous volume of export trade during the past decade will appear to have been an easy job beside the one we face in the next few years. The rapid growth for ten years after the war was built up on the friendly, ready acceptance of our mass-produced merchandise by other countries, and their ability to purchase these goods was bolstered by our enormous and continuous stream of foreign loans.

"The friendly acceptance of our goods has been hampered by the discussion which preceded and followed passage of the Smoot-Hawley tariff schedules. The advantage in price arising out of mass production and mass distribution has been seriously cut in some instances by tariff reprisals. America is in hot and growing competition with several other nations. We are in a position where we have got to go forth with tact and fairness to do what we can to rebuild confidence in the intentions of the United States and to sell our goods more on the basis of their real economic

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REEVES AND HEMINWAY WILL ADDRESS TRADE MEETING NEXT MONTH

Niagara Falls, Ontario, Aug. 14.—The part of the trade association in bettering business conditions has been announced as the principal subject before the eleventh annual convention of the American Trade Association Executives, which will be held at the Clifton House here September 24 to 27.

The convention will bring together managers, secretaries and other professional executives in charge of nearly all the leading trade associations of the United States, and replies already received indicate the

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Hudson-Essex Meets Oakland Price Reduction

DETROIT, Aug. 14.—The price cut in the Oakland-Pontiac lines, announced in Wednesday's issue of the Automotive Daily News, was promptly met by Hudson-Essex. The cuts on Hudson models reached a maximum of $355, and those on the Essex offerings ranged up to $110.

This places the Hudson-Essex lines at the lowest prices at which they ever have sold, and makes the Hudson coupe at $885 the lowest priced eight-cylinder car on the market. In the following table will be found the new Hudson and Essex prices, and in comparison the new Oakland-Pontiac scale, similar models being placed opposite each other wherever possible:—

OAKLAND		HUDSON	
Roadster	$ 895	Roadster	$ 995
Coupe	895	Coupe	885
Two-Door Sedan	895	Coach	895
Sport Coupe	965	Rumble Coupe	925
Four-Door Sedan	995	Standard Sedan	1,025
Custom Sedan	1,045	Town Sedan	1,145
Phaeton	1,075	Seven-Pass. Sedan	1,295
		Sun Sedan	1,045
		Brougham	1,195
PONTIAC		**ESSEX**	
Coupe	$665	Coupe	$650
Roadster	665	Roadster	695
Two-Door Sedan	665	Coach	650
Four-Door Sedan	725	Town Sedan	775
Sport Coupe	725	Rumble Coupe	685
Custom Sedan	785	Sun Sedan	695
Phaeton	795	Brougham	795
		Standard Sedan	715

PREDICTS AUTUMN GAINS; PRODUCTION ON UPGRADE

Cleveland Economist Declares Recovery Is Close At Hand, but Will Be Slow and That Sentiment May Vary

CLEVELAND, Aug. 14.—"Clearly, more people are riding more miles in more automobiles this year than ever before," remarks Col. Leonard P. Ayres, vice-president of the Cleveland Trust Company and business economist of national note in the current issue of the bank's bulletin. This conclusion comes from the record of gasoline sales.

Nevertheless the colonel is restrained in his optimism, although believing that the bottom of the business depression is being reached and that the processes making for recovery are gathering force.

Col. Ayres also, by means of a chart study covering a period of twelve years, notes that the automobile industry apparently is becoming progressively stabilized, despite the fact that it still swings rapidly from prosperity to depression and back again and is also excessively seasonal in its activity.

Business sentiment and business statistics, Col. Ayres points out, have moved in opposite directions during the past month. Sentiment, he believes, has rather definitely improved, following the low point of the wave of pessimism that prevailed late in June and early in July. On the other hand, industrial production dropped to new low levels in many lines in July. Railroad transportation shrunk notably, and both wholesale and retail trade lagged badly.

"It seems clear that definite improvement is going to come slowly," he says. "It is almost certain that figures for industrial production and for tranportation will be better in August than in July, and that an upward trend will be in evidence in September.

"Nevertheless, while these changes will be in the right direction, they do not promise to be emphatic, and there is some likelihood that before they become apparent business sentiment may suffer another attack of gloom.

"Just as stock prices after a bear move often suffer a secondary reaction, so there may be a secondard reaction of sentiment, making a double bottom for pessimism."

One month ago Colonel Ayres in his review took encouragement from the report that many automobile companies were planning to increase outputs in August and September. Industrial and business records for July, he predicted, would reach low ebb, probably marking the turn of the tide. Now he appears even more convinced that the turn is at hand, despite the liklihood that recovery may be slow.

"In a seasonal sense, business is now moving with the tide instead of against it," the review declares. "Industrial production always slows down in the summer and quickens in the autumn. July is normally the slow month, with August showing a definite improvement, and September an even greater one. Freight movement increases in even greater proportion during these same months. These betterments may be confidently expected this year, and the improvement they

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Forty-Three Out of Fifty Companies Report Profits

NEW YORK, Aug. 14.—Among the fifty representative automotive manufacturers that have reported earnings for the first half of the current year, forty-three showed profits, leaving but seven companies with losses, despite curtailed production. The deficits were small in all cases but one.

This showing by the automotive industry compares favorably with industry as a whole in the United States for the first half year.

Three of the first fifty automotive companies to report were rubber manufacturers and two of these showed losses. Out of twelve car and truck manufacturers, only two companes reported deficits, while among thirty-five accessory, parts and equipment makers only three failed to make money in the first half.

Only in the case of the United States Rubber Company did the first half loss reach $1,000,000, and that figure was approached by only two companies among the equipment manufacturers.

Twelve passenger car and truck companies reported net earnings of $119,676,150 in the first six months of the year, while the thirty-five accesory and equipment manufacturers showed net earnings of $28,422,438, making a total of $148,098,588 for the forty-seven companies. The three rubber companies reporting earnings showed a net of $1,919,726.

The ten of the twelve passenger car and truck makers reporting profits for the first half showed an aggregate of $120,906,507. After the $349,397 loss of Reo and $880,960 deficit of Graham-Paige were subtracted from the total, there was left $119,676,150. Of this amount,

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August Sales on Upward Trend in Kansas City, Mo.

KANSAS CITY, Mo., Aug. 14.—**The drought that has been sweeping the country did its greatest damage in the Middle West, but in spite of this condition, automobile dealers and distributors are reporting increased new car buying and declare prospects for the fall are good.**

A heavy rain fell in this section a few days ago, and while it came too late to save much of the corn, it is proving a boon to the live stock industry. This section being in the heart of the wheat belt, a short corn crop likely will mean increased wheat prices. Automobile dealers advance this as one of the reasons for better sales and prospects.

Sales in the light car field have predominated in the last few weeks, but the dealers in the higher priced field are reporting their prospects are "recovering from the mental shock of deflated prices" and are beginning to buy. The announcements of new models also have had a retarding effect on sales of the last few weeks, prospects being unwilling to buy until they had "looked 'em all over."

J. D. McInnes, sales manager of the Duke Motor Company, Buick dealer, says the response to the new Buick line is highly satisfactory and that the company was able to clean up on all old models and reduce its used stock to a minimum before the new lines arrived.

E. F. Williams, president of the Franklin Williams Motor Company, Franklin distributor, says August interest and sales are increasing.

Kelley Freeman Motors, Hupmobile distributors, reports sales on new cars as slow, but used cars moving well.

A. M. Antrim, vice-president of

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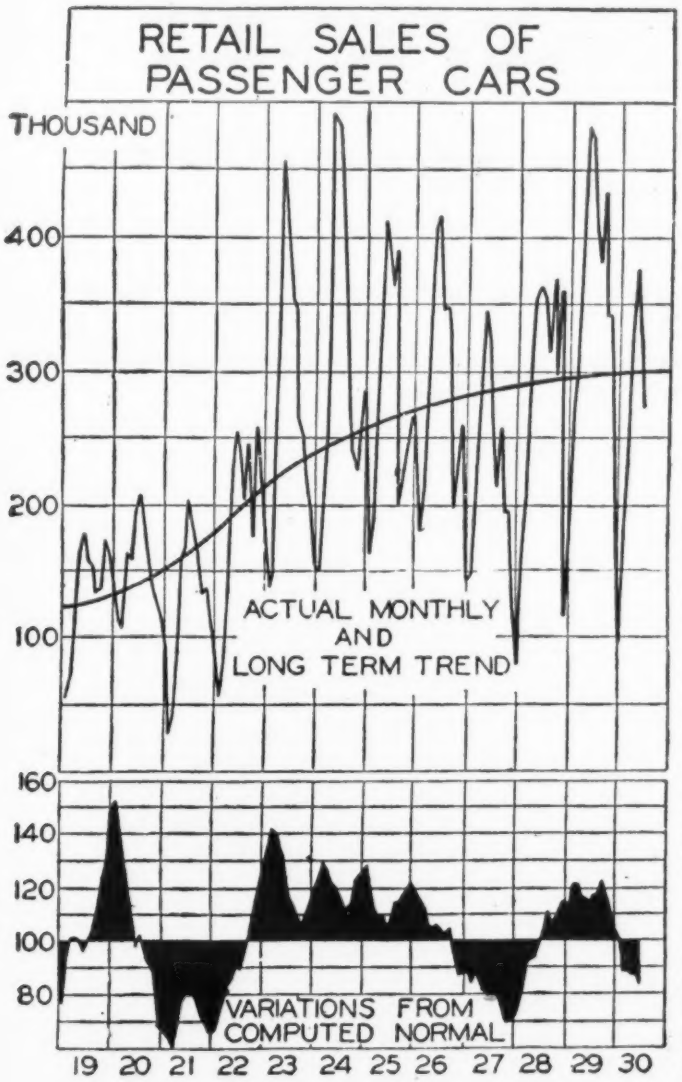
Ayres Predicts Upswing In Business in Autumn



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usher in will probably prove more than merely seasonal."

Col. Ayres sees improvement in the bond market under way with prices rising. Steel operations continued to decline during the first half of July, but reached at least a temporary level of stabilization in the second half of the month. Steel takings by the automotive industry fell to exceptionally low volume during July. Iron and steel prices, continuing downward, are a matter of serious concern to the industry.

From a chart study of industrial production and distribution extending back to 1919 Col. Ayres concludes that by autumn both production and distribution will be expanding with production leading and distribution following closely.

In each month so far this year the consumption of gasoline has run well ahead of that of the corresponding month of last year and of previous years. This is clearly shown by the accompanying diagram prepared by the Cleveland Trust Company.

Of course by far the greater part of this gasoline is being consumed in the motors of automobiles. The clear evidence of the figures, says Col. Ayres, is that people are running their machines as freely as ever, even though they are economizing in buying new cars and new tires, and, indeed, in many other sorts of purchases.

In the diagram the six slanting lines represent the number of millions of barrels of gasoline consumed in this country in each of the first six months of the year during the period since the beginning of 1924. The upwar dslant of the lines represents the steady growth in gasoline consumption during the past seven years. The average use is now well over a million barrels a day, Sundays included.

It is to be noted that the general advance in the lines from 1929 to 1930 is about the same as that between any two previous years. In point of fact the figures indicate that the increase in gasoline consumption in the first half of 1930, over that of 1929, was a little greater than the average advance from one year to the next in those data of semi-annual consumption during this seven-year period. The consumption data for this past June are as yet only preliminary, but are probably nearly correct.

Probably it would require a much prolonged and more severe depression than this one to cause any serious curtailment in our use of gasoline in automobiles. Nevertheless, it is a bit astonishing to discover that there has not only been no decrease this year, but that there has actually been no slackening in the rate of increase. Clearly more people are riding more miles in more automobiles this year than ever before.

In the other accompanying chart, a progressive stabilization of the automobile industry is indicated.

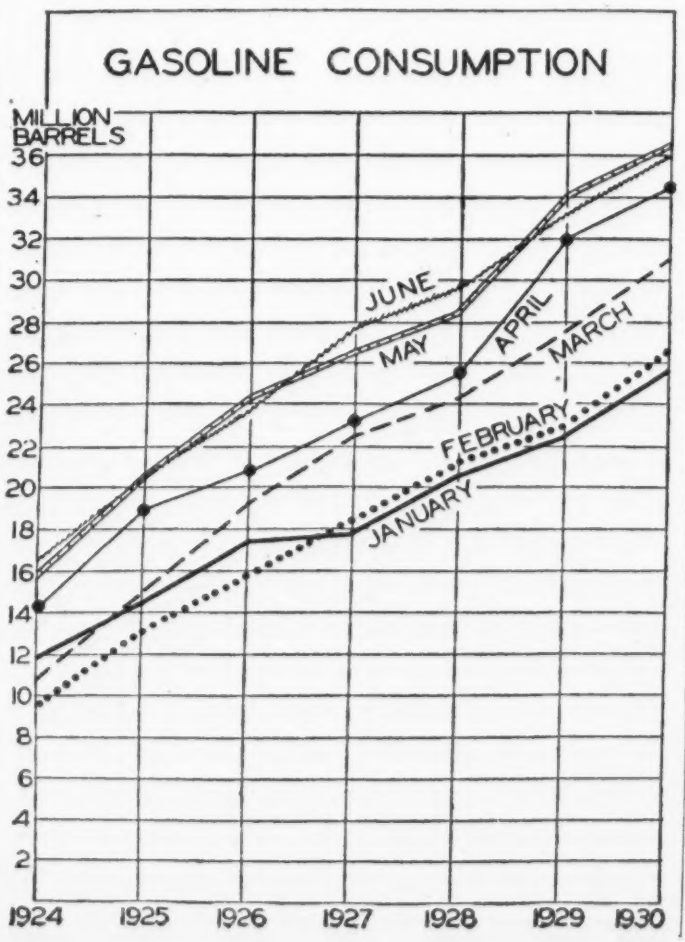
Automobile production in July fell so low, says Col. Leonard P. Ayres, vice-president and statistician of the Cleveland bank, that probably one would have to go back in the records for ten years to find July output figures that were definitely smaller. Retail sales also were at low ebb, although the figures will probably not show for last month so striking a contraction as did those for production. However that may prove, it is already clear, says Col. Ayres, that almost all the records relating to the industry will be distinctly below normal for 1930. This will be so even if there is a real improvement during the autumn.

In the diagram the highly irregular line in the upper portion shows monthly during the last twelve years, the retail sales of passenger automobiles in this country. The recurring peaks show how sales mount in the spring, usually reaching their highest volume in April or May and fall in the winter to low points in December, January and February. The seasonal swings are so great that the volume of sales in the spring is always more than twice that of the winter, and sometimes it is four or five times as great.

Through the irregular line representing the actual monthly swings there has been drawn a smooth curved line representing the computed long-term trend. It was rising slowly in the earliest years of the period. It advanced rapidly from 1921 to 1925 and since then it has been flattening out until now its advance is only gradual.

The fact is that the American market for passenger cars is no longer a rapidly expanding one, even when times are much better than they are just now.

When the irregular line of the upper portion of the diagram has been corrected to eliminate the purely seasonal variations, and then expressed to show the percentages by which it rises above or falls below the curved trend line, a result is produced which is shown in the black silhouette in the lower part of the diagram. The trend line is now shown as the normal line, and the black surface indicates that sales of passenger cars fell far below normal in 1921, in 1927, and in 1930, and rose well above in the intervening years and in 1929.



SPARKS from DETROIT

• • •

Taylor Appointed

• • •

Traffic Tidbits

• • •

IRVING H. TAYLOR of Detroit and New York city, who since 1923 has been actively associated with the automotive export interest, today was appointed United States trade commisioner for the Department of Commerce, with headquarters in Milan, Italy.

IRVING H. TAYLOR

Before sailing for his new post September 13, Mr. Taylor, who speaks French, German and Italian, will visit a number of important industrial centers in the Middle West and Atlantic states in order to familiarize himself with the current activities in the north Italian market of leading American exports.

He recently severed his connection with the foreign market research division of General Motors export division at New York.

In 1923 he joined the export department of Dodge Brothers to handle foreign advertising and sales promotion work. In 1925 he entered the service of the Bureau of Foreign and Domestic Commerce here as assistant chief of the automotive division and continued in this capacity until 1928, when he resigned to join the General Motors forces.

Mr. Taylor received his early education in Detroit, attended the Irving School, Tarrytown, N. Y., and later was graduated from Princeton University.

Upon his graduation he became associated with a large Detroit concern manufacturing electric generating machines. He enlisted during the World War and was assigned to the Italian army, later being transferred to the American Expeditionary Forces, with which he served throughout the St. Mihiel and Meuse-Argonne offensives.

* * *

THERE is scarcely a day that traffic news from this citadel of motordom fails to produce a smile or so for the observant student of the newspapers. We found three chuckles in a recent day's news.

The first we might call "the height of optimism." The item concerned a naive gentleman who drove his car straight into one driven by a policeman. That is our idea of exactly nothing to do. It cost him $25 and a term of probation on a charge of reckless driving. We'll say it was.

The next item concerned a gentleman who was bringing nine friends home from a dance and missed Woodward Avenue altogether. That's a hard thing to do, but this particular person complicated it by hitting a truck that was bringing a load of cherries into town. The next driver who is tempted to miss Woodward Avenue can correct his mistake by watching for the cherry stains.

And, finally, there was one about a plasterer who pursued his vocation, but, unhappily, not in its obvious field. Instead, he got himself plastered and then got himself placed on a year's probation, just for good luck. "Plastered Plasterer on Probation!" Oh, certainly we could write half a dozen heads for that item.

AUGUST SALES UP IN KANSAS CITY, MO.

(Continued from Page 1)

Berryman Reo Company, Reo distributor, reports as many new sales the first week in August as in all of July, and says fall prospects are exceptionally good.

Southwest Motor Car Company, Pierce-Arrow distributor, reports sales as seasonable.

Armacost Motor Company, Studebaker distributor, says sales in July were equal to a year ago, and that while the drought is having its effect, fall prospects are very good.

Max Butler, sales manager of the Butler Motor Company, Graham distributor, says July was a good month and that August looks better.

George Wall, sales manager of the Auburn Douglass distributors, Cord and Auburn distributor, says August sales are 50 per cent ahead of last year. He believes the "aftermath" of the stock market crash which he terms mental rather than actual, is passing and that there will be unusual buying activity before winter in spite of the drought.

CHICAGO PNEUMATIC TOOL ADDS TO ITS PAY ROLL

Franklin, Pa., Aug. 14.—Several hundred men were added to the pay roll at the local plant of the Chicago Pneumatic Tool Company this week, and officials of the concern are confident that near-capacity production schedules now in effect will be maintained throughout the balance of the year. The company last week received orders for nineteen Diesel engines and twenty large air compressors.

Maine New Car Sales Show Only 13.4% Decline in June

FORD HAS GAIN OVER JUNE, 1929

Nine Other Makes Show Increases Over Last Year

NEW YORK, Aug. 14.—New car registrations in Main during June were only 13.4 per cent. under the same month a year ago and 12.1 per cent. lower than in May. During the first half of the year the decrease was 20.3 per cent., as compared with the first six months of 1929.

Ford sales were higher than in June, 1929, but were slightly under May, 1930. Other makes showing gains in June over the same month last year were Auburn, Buick, Cadillac, Hupmobile, Oakland, Packard, Peerless, Plymouth and Studebaker, while gains made in the first six months were recorded by Auburn, De Soto, Hupmobile, Marquette, Oakland, Pierce-Arrow and Studebaker. Both Cadillac and Lincoln tied their 1929 six-month records. Ford and Chevrolet were behind their 1929 marks, the former by 231 units and the latter by 120 units.

The registration for June as compared with the same month a year ago and with May of this year, follows:

	June 1930	June 1929	May 1930
Auburn	6	4	7
Austin	1	x	x
Buick	93	91	120
Cadillac	10	9	16
Chevrolet	535	607	668
Chrysler	88	90	99
Cord	1	x	1
De Soto	41	44	49
Dodge	89	100	113
Durant	33	42	38
Essex	151	305	219
Ford	1072	1037	1150
Franklin	3	19	12
Graham	25	32	36
Hudson	46	85	68
Hupmobile	25	14	25
LaSalle	14	15	14
Lincoln	2	4	2
Marmon-Roose.	9	36	16
Marquette	8	29	26
Nash	88	113	101
Oakland	38	28	32
Oldsmobile	74	93	69
Packard	49	38	26
Peerless	12	11	5
Pierce-Arrow	2	4	7
Plymouth	170	137	135
Pontiac	131	138	133
Reo	9	45	15
Studebaker	84	69	105
Viking	2	5	..
Whippet	20	179	26
Willys	45	x	66
Willys-Knight	22	47	22
Miscellaneous	2	4	1
Totals	3000	3465	3414

x—Not on market at that time.

WAYNE COUNTY FORD AND CHEVROLET SALES HOLD UP WELL

Several Dealers Report Sale a Day; Renewed Energy Needed to Sell, Due To Industrial Slump, Survey Shows.

By REX McCONNELL

WOOSTER, O., Aug. 14.—Although some parts of eastern Ohio have been hard hit by the industrial slump, which has resulted in new car sales being far below those of a year ago, Wooster and all of Wayne county have been less affected perhaps than some of the nearby large cities and, while new car sales have been below those of a year ago, few dealers of Ford and Chevrolet automobiles will wind up the year in the red, it was learned, following a survey of the county this week.

In Wooster, where there is no industry to speak of, new car sales since the first of August show a nice gain and from all indications this month will see greater activity in new car sales than any other thirty-day period since last April, which to date in 1930 was the best month for majority of automobile distributors.

Scott Gisinger, president of the Gisinger Chevrolet Company, reported a new car a day sold the first week in August, and almost as many certain for the second week in the month. The same is true with the Roy Martin Company, Ford dealer here, which concern has been making a steady gain in new car sales for the past several days.

Since there is little industry here and in other smaller towns in the county, the automobile dealer depends almost entirely on the farmer for his business. But this summer has been one of the worst in fifty years for the farmer on account of the continued dry spell which has resulted in loss to crops to near a million dollars. With this source eliminated, dealers have been compelled to put forth renewed energy this summer to make sales, and some of the more enterprising concerns have succeeded remarkably well, it is learned.

In the case of the Gisinger Company, largest distributors of Chevrolet cars in this zone, sales of new cars have been approximately one-third less than a year ago, taking into consideration the first six months of the year. The month of July proved the slowest so far this year in volume of sales, both new and used cars, and even in service sales demand.

Through July, the farmer gave his undivided attention to the harvesting of his crops and spent every minute in trying to save them from drying up. He found no time to talk buying of automobiles, and salesmen report they have been unable to get the average grower to grant them an interview. Realizing now that majority of their crops will be lost on account of the continued drought, some farmers are coming into the showrooms and are making inquiry as to new cars. So few are talking buying that what deals are being made are closed only after much deliberation.

In Wayne county, the first six months of 1930 records show there were 1,054 new cars sold, as against 1,500 for the same period a year ago. Of this number 516 were Fords and 361 were Chevrolets. The remaining few were distributed among a dozen distributors selling higher priced cars. On this basis, Ford cars are selling three to every two Chevrolets, dealers estimated.

Service sales in this particular area have been spotty. Usually two slack days are followed with a short-lived period of activity, which in some instances compelled service departments to work overtime. There is plenty of service business in the air, dealers report, if people only could spare the money to recondition their cars. Until the situation eases, dealers here believe service sales will continue more or less about the same volume.

The Gisinger Company the first six months of the year sold approximately $16,000 worth of parts, $2,000 of this being internal parts used by the company to service cars brought in for reconditioning. At least $10,000 of this business had to be sold at a discount to fleet owners, industrial plants and to insurance companies which brought in wrecks and repair jobs. Parts business the first half of the year has been approximately 12 per cent. under the same six months a year ago.

Gisinger believes there are many things that the manufacturer can lend his assistance to that will help to make it easier for the dealer in such times as these. He believes that sooner or later the manufacturer will see some of these ills and correct them. The condition of the country and the shortage of money is not alone blamed for the lack of interest in new car sales by dealers in this section of the state, but these are the chief contributing factors, they say.

The many small town dealers hereabouts are giving the city distributor but little competition in this zone, due to the fact that a majority of the farmers are coming to the larger dealers to make their purchases. They are convinced that he is better equipped to give service, will make him just as good an offer as the crossroads garage and will continue to maintain an interest in him long after the sale is consummated.

Used car sales in this section have been slow for some weeks. Most dealers have been able to move about as many used cars as they accept in trade for new cars, but, however, there are some who are well stocked at this time. The farmer has had no money to buy used cars this summer, and consequently the dealer has been given little encouragement from this source.

It is also predicted that the last half of the year will see none other than normal activity in new car sales, since dealers through this area concentrate their efforts on sales this first six months of the year, and they depend on occasional sales and service to keep them even the last half of the year.

CLASSIFIED ADVERTISEMENTS IN THE AUTOMOTIVE DAILY NEWS BRING RESULTS

The following are the registrations for the first six months, compared with the same period last year:

	1930	1929
Auburn	18	10
Austin	1	*
Buick	427	590
Cadillac	50	50
Chevrolet	2,275	2,395
Chrysler	307	332
Cord	3	*
De Soto	164	150
Dodge	332	424
Durant	118	146
Essex	729	1,433
Ford	3,723	3,954
Franklin	31	67
Graham	89	117
Hudson	231	319
Hupmobile	99	71
La Salle	57	94
Lincoln	12	12
Marmon-Roosevelt	44	118
Marquette	75	29
Nash	315	586
Oakland	122	116
Oldsmobile	265	343
Packard	119	166
Peerless	22	66
Pierce-Arrow	22	14
Plymouth	383	642
Pontiac	449	642
Reo	43	169
Studebaker	324	303
Viking	4	9
Whippet	69	667
Willys	201	*
Willys-Knight	72	155
Miscellaneous	11	75
Totals	11,211	14,074

*Not on market at that time.

PIERCE-ARROW SALES CORP. APPOINTS F. B. SULLIVAN

New York, Aug. 14.—Appointment of Frank B. Sullivan, one of the most widely known New York automobile executives, as retail branch manager of the Pierce-Arrow Sales Corporation of New York city was announced today by David J. Willoughby, general sales manager of the Pierce-Arrow Motor Car Company at Buffalo, at an organization luncheon held at the New York Athletic Club.

Mr. Sullivan joins Pierce-Arrow after thirteen years with the New York Packard Company, first as retail salesman, later as sales manager of the New York branch, and since 1925 as general sales manager in charge of retail sales of Packard's New York branches.

110 CHEVROLET DEALERS GATHER IN JAMESTOWN

Jamestown, N. Y., Aug. 14.—One hundred and ten Chevrolet dealers in southwestern New York and northwestern Pennsylvania attended a banquet and sales meeting in the Hotel Jamestown Yesterday, sponsored by the Chevrolet Motor Car Company and the Par-Ket Motor Sales Company, distributor. The fall sales campaign was discussed in short talks by Paul R. Stewart, sales manager, and S. W. Williams, assistant sales manager, of the Chevrolet Motor Car Company.

DEALER IN NEW HOME

Davenport, Ia., Aug. 14.—The Kessler Motor Company, which since it acquired second Ford dealer franchise here a few weeks ago, has occupied temporary quarters at 418 Main St., has moved to 316 East Second St. Charles M. Kessler is head of the dealer organization.

FORD DEALERSHIP CHANGE

Wallingford, Conn., Aug. 14.—A new corporation, probably to be headed by Roland Sherwood, former manager, will take over the Wallingford Ford dealership of Dutee W. Flint, it has been announced. The dealership will retain its showrooms and service department at 9 South Colony St.

REEVES AND HEMINWAY ON TRADE PROGRAM

(Continued from Page 1)

largest attendance in the history of the organization.

Several other trade bodies will hold metings at Niagara Falls while the A. T. A. E. is in session. One of the most important of these is the conference of industries that have held trade practice conferences. This group will meet on September 25, and all trade associations interested are invited to send representatives. Abram F. Myers, chairman of the Standing Committee, will present a comprehensive analysis of revisions requested by the Federal Trade Commission in trade practice conference rules, and discuss the extent to which such revisions are necessary in order that the rules may be sustained by law. The members of the Federal Trade Commission have been invited to attend this meeting.

The A. T. A. E. program has been arranged so that all the addresses and reports may focus upon the central theme of "Better Business." The keynote address will be made at the opening session on September 24 by President M. L. Heminway, secretary of the Motor and Equipment Association. Arrangements are being made also for addresses by leading figures in the business world outside of the ranks of the association, whose names will be announced later.

The general session on September 24 will be opened by Alfred Reeves, general manager of the National Automobile Chamber of Commerce, whose subject will be "Facts, the Basis for Business Improvement."

CUMULATIVE NEW PASSENGER CAR REGISTRATION STATISTICS, JULY, 1930

Returns for today: North Dakota

	Auburn	Austin	Black Hawk	Buick	Cadillac	Chevrolet	Chrysler	Cord	DeSoto	Dodge	Durant	Essex	Ford	Franklin	Gardner	Graham	Hudson	Hupmobile	Jordan	La Salle	Lincoln
Illinois	75	34	3	562	72	3495	411	41	269	346	103	242	7270	50	19	175	153	280	6	66	27
N. Dakota	1	2		12		352	17		10	19	13	6	497			12	4	1			
Total	76	36	3	574	72	3847	428	41	279	365	116	248	7767	50	19	187	157	281	6	66	27
Ill., '29	256	*	16	1101	119	5116	655	*	504	893	261	1323	9072	56	18	553	560	397	12	209	72
N. D., '29	3			50	1	468	28		32	45	39	62	968	1		28	12	5			1
Total, '29	259	*	16	1151	120	5584	683	*	536	938	300	1385	10040	57	18	581	572	402	12	209	73

	Marmon	Nash	Oakland	Oldsmobile	Packard	Peerless	Pierce-Arrow	Plymouth	Pontiac	Reo	Studebaker	Stutz	Viking	Whippet	Willys	Willys-Knight	Windsor	Miscellaneous	Totals
Illinois	73	411	134	359	273	27	30	453	418	59	519		14	69	201	100	25	19	16,883
N. Dakota	7	15	6	20	6			48	27	1	21		2	18	18	5			1,140
Total	80	426	140	379	279	27	30	501	445	60	540		16	87	219	105	25	19	18,023
Ill., '29	194	1135	265	883	291	81	50	813	1651	152	859	22	109	1083	*	224	22	806	29,833
N. D., '29	21	52	8	49	7		1	77	83	1	39	2	3	158		25		6	2,275
Total, '29	215	187	273	932	298	81	51	890	1734	153	898	24	112	1241	*	249	22	812	32,108

*Not in production at that time.

Automotive Daily News

"Of, By and For the Entire Automotive Industry"

Published Every Day Except Sunday and Monday by
AUTOMOTIVE DAILY NEWS PUBLISHING CORPORATION,
350 Hudson St., New York, N. Y.
O. J. Elder, President. H. A. Tarantous, Vice-President. Alexander Johnston, Secretary.

Entered as second-class matter August 27, 1925, at the post office at New York, N. Y., under the Act of March 3, 1879.

Circulation—Net paid Average over 10,000 daily guaranteed.
Member A. B. C.

FRIDAY, AUGUST 15, 1930

ADVERTISING AND BUSINESS HEADQUARTERS

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Mail subscriptions to CIRCULATION DEPARTMENT—C. H. Wilson, Manager.
1926 Broadway, New York, N. Y. Telephone TRA falgar 4500
Subscription Rates—One year, $12.00; two years, $20.00, for United States and Canada. To Foreign Countries—One year, $15.00; two years, $26.00. Single copies, 10 cents.

Drought Conditions

AS is usual in such cases, the extent and effect of the present drought throughout extended areas of the agricultural sections have been somewhat exaggerated. The average man reading the daily paper might be pardoned for getting the impression that every living, growing thing in ten states or so had been completely burned to a crisp.

To get a definite picture of just what the damage has been and what the effects are likely to be on the automotive business, Automotive Daily News recently asked its correspondents to interview dealers in their sections and get first-hand opinions. The result of this survey indicates that, while the drought has injured crops in many sections, the farmers will still have produce to sell and dealers look for a satisfactory volume of business in the fall.

The truth is that droughts are not wholly evil in their effect, unless they are of so sweeping a character as to wipe out entire crops. Reduction of crops is by no means an unmixed evil. While the farmer has less to sell, he gets higher prices, and at the same time reduces his transportation bill, one of the most important items on the debit side of his ledger. If, for instance, this year's wheat crop were reduced to a level where it just filled our needs, plus the remnants of last year's yield now in storage, the price of this staple would promptly zoom upward and the hard-pressed farmers would actually benefit.

The truth is that the farm sections, particularly the wheat-growing areas, are suffering from overproduction, exactly as the automotive industry has suffered all year. The difference is that in the automotive industry some twenty odd companies can apply the remedies needed. In the agricultural business the problem is to get four or five million individual farmers to agree on and apply the same remedies. The recent reported remark of, we believe, the Governor of Kansas to the effect that "only God can limit the amount of wheat grown in Kansas" is a rather apt statement of the basic trouble.

Silenced Whistles

NEW YORK is trying a little innovation in traffic control this week, which may hold considerable interest for other municipalities. Police Commissioner Mulrooney has temporarily taken away, from his policemen on traffic duty, their cherished whistles. No longer will the cops give two distinct toots to start traffic moving.

The commissioner's idea is that traffic policemen will give closer attention to duty and be able to see more accurately just what is happening by being forced to face traffic and start it by signals made with the arms than with blasts of the whistle. If the new method of direction, giving drivers directions through the eyes instead of through the ears, promotes safety or expedites traffic flow even by a fraction of a second per stop and start, it will be a real contribution to one of the most serious problems we have in urban districts.

Sunday Show Opening

ADVOCATES of Sunday opening for the New York National Automobile Show are once more trying to promote this innovation. Sunday opening would give many people a chance to visit the show who are otherwise kept away. It would tend to spread out the crowd so that congestion would be reduced on other days. The automobile show is not a noisy or rowdy exhibition. It is not out of keeping with the spirit of the day. What serious objection can be made to opening the show on the Sabbath while movies are allowed to operate we cannot see.

Ford Car Sales Exceed 1929 in 19 States and D. C.

NEW YORK, Aug. 14.—Registrations of new Ford passenger cars in the first six months of this year exceeded the corresponding period of last year in nineteen states and the District of Columbia, according to the retail sales statistics.

These states were chiefly on the Atlantic Seaboard, where Ford sales were no less than sensational in many places. Ford sales showed gains over last year in five of the six New England states, six Eastern states and four Southern states and the District of Columbia. The remaining states were Illinois and Wisconsin, in the Great Lakes sector, and California and Washington on the Pacific Coast. In no state in the agricultural section of the Middle West or the Rocky Mountain section did Ford sales show a gain over last year.

In three of the above geographical divisions of the country, Ford registrations in the half year exceeded those of the first six months of 1929. These divisions were the East, New England and the Pacific Coast.

Registrations of new Ford cars in the six New England states amounted to 46,451, as compared with 39,145 in the corresponding period of last year, a gain of 18.6 per cent.

In the six Eastern states of New York, Pennsylvania, New Jersey, Maryland, West Virginia and Delaware, Ford sales were higher than a year ago, totaling 142,998, as compared with 111,999 in the first six months of 1929, a gain of 27.8 per cent. Ford sales in these states made the best showing of any section of the country. A substantial increase was set up in each state, with the three large states of New York, Pennsylvania and New Jersey accounting for the bulk of the increase.

In the thirteen states of the South and the District of Columbia, new Ford registrations in the half year period were 154,784, as compared with 173,627 in the corresponding period of last year, a decline of 10.7 per cent.

In the six states around the Great Lakes, Ford retail sales amounted to 194,385, as compared with 200,219 in the first half of 1929, a loss of 2.9 per cent.

In the agricultural belt, Ford registrations failed to approach last year's mark. In the six states, the total was 64,132, as against 76,681 a year ago, a loss of 16.3 per cent.

The worst showing made in any section of the country by the Ford was in the Rocky Mountains, where aggregate sales in the eight states amounted to 21,162, as compared with 25,942 in the similar 1929 period, a loss of 18.4 per cent.

On the Pacific Coast a good showing was made, with a total of 60,614, as against 56,062 a year ago, a gain of 8.1 per cent.

In New England, Maine was the only state in which Ford registrations failed to reach last year's mark. The loss was not great, however, the total being 3,723, as compared with 3,928 last year.

In the South, Missouri, Virginia, Florida, Alabama and the District of Columbia set up gains, while in the Great Lakes area only Illinois and Wisconsin showed increases. On the Pacific Coast, California and Washington had Ford sales greater than in the first six months of last year.

Among the more substantial increases shown by the individual states were those of New York, with registrations of 56,199, as against 39,351; Pennsylvania, with 46,652, as against 40,671; New Jersey, 22,445, as compared with 15,682, and Illinois, 42,958, as against 37,944. New Jersey showed the best percentage increase, amounting to nearly 50 per cent.

Following are the Ford registrations, arranged by states in geographical divisions, for the first six months of this year, as compared with the corresponding period of last year, with the percentage of change shown for each division:

	1930	1929	
NEW ENGLAND			
Massachusetts.	27,021	21,859	
Connecticut...	8,032	6,928	
Maine	3,723	3,954	
Rhode Island.	3,218	2,830	
N. Hampshire.	2,521	2,071	
Vermont	1,936	1,503	
Totals	46,451	39,145	+18.6%
EAST			
New York	56,199	39,351	
Pennsylvania..	46,652	40,671	
New Jersey...	22,445	15,682	
Maryland	8,888	8,000	
West Virginia.	6,831	6,520	
Delaware	1,983	1,775	
Totals	142,998	111,999	+27.8%
SOUTH			
Texas	32,362	41,321	
Missouri	24,451	22,268	
Virginia	12,534	11,797	
Kentucky	10,415	11,144	
Tennessee	10,770	11,579	
Georgia	8,443	9,508	
N. Carolina...	9,159	15,037	
Louisiana	7,062	8,844	
Florida	9,182	8,000	
Mississippi ...	7,037	7,762	
Arkansas	5,507	7,592	
Alabama	7,593	6,951	
S. Carolina...	5,287	7,611	
Dist. Columbia.	4,982	4,213	
Totals	154,784	173,627	—10.7%
GREAT LAKES			
Michigan	49,623	56,913	
Ohio	42,738	45,387	
Illinois	42,958	37,944	
Indiana	20,551	21,486	
Minnesota	20,111	20,652	
Wisconsin	18,404	17,837	
Totals	194,385	200,219	— 2.9%
MIDDLE WEST			
Iowa	19,710	20,019	
Oklahoma	14,121	19,354	
Nebraska	10,994	13,843	
Kansas	10,774	11,770	
South Dakota.	4,746	5,765	
North Dakota.	3,787	5,930	
Totals	64,132	76,681	—16.3%
ROCKY MOUNTAINS			
Colorado	7,058	8,663	
Montana	2,723	4,175	
Utah	2,964	3,388	
Arizona	2,233	2,880	
Idaho	2,723	2,868	
New Mexico...	1,716	1,935	
Wyoming	1,199	1,355	
Nevada	546	678	
Totals	21,162	25,942	—18.4%
PACIFIC COAST			
California	45,175	41,004	
Washington ..	9,598	8,981	
Oregon	5,841	6,077	
Totals	60,614	56,062	+ 8.1%

A. S. A. STRESSES WORK OF EMPLOYMENT BUREAU

New York, Aug. 14.—The work of the employment bureau of the Automotive Service Association here is being stressed by officers of the organization and promoted in every way possible both as a means of service to the individual members and to firms engaged in the automotive field.

The bureau has been in existence five years and operates with no charge to either applicant or employer. Its record to date was the placing of seventy-two service executives in one year.

Accurate information as to the past experience and capabilities of applicants is on hand at the employment bureau at all times. As the bureau specializes in supplying automotive executives exclusively it is better qualified than the regular employment agency which supplies general help, officials of the A. S. A. pointed out at a recent board meeting.

Employers seeking service salesmen, foremen, assistant service managers or fleet managers can apply to the employment bureau of the A. S. A. at 1819 Broadway.

Ask Us to Tell You

In presenting this service department, The Automobile Daily News is actuated by the desire to help its readers solve their problems.

In some instances readers may desire information which will require an expenditure of money to secure, and in such cases we shall be glad to get the desired data at the least possible cost, or we shall inform our readers where they may obtain it most economically and expeditiously.

THE ROYAL TOURIST

QUESTION: Will you please tell me if you can in your answer department, whether there ever was a car known as the Royal touring car manufactured in this country, and if it was sold in New York?

L. F. D., New York city.

ANSWER: We believe that you refer to the Royal Tourist which was manufactured back about 1903 and 1904. It was handled in New York, we believe, by Wanamaker.

ATLAS SUPPLY CO.

QUESTION: We note in your issue of August 6 that the Standard Oil Company plans selling tires through their service stations. We also note that this business will be handled through the Atlas Supply Company, of which F. H. Bedford, Jr., is president. Can you give us the address of this corporation? We will be pleased to have you give us this information at your early convenience. We take it from your article that the address is New York city, but we fear, if we addressed it to New York city only, our correspondence would not reach them.

A. W. L., Fort Lauderdale, Fla.

ANSWER: The Atlas Supply Company, 420 Lexington Ave., New York city, is the address you want.

COMING EVENTS

AUGUST

26-28—**Chicago, Ill.** Society of Automotive Engineers aeronautic meeting in conjunction with National Air Races.

SEPTEMBER

22-26—**Chicago, Ill.** American Society for Steel Treating meeting at Stevens Hotel.

29-Oct. 4—**Pittsburgh, Pa.** National Safety Council Annual Safety Congress.

OCTOBER

2-12—**Paris, France.** Automobile Salon.
6- 7—**Reading, Pa.** Pennsylvania Automotive Association Convention.
6-11—**Washington, D. C.** Sixth International Road Congress.
6-11—**Washington, D. C.** American Roadbuilders' Association Convention.
7- 8—**Detroit, Mich.** Society of Automotive Engineers production meeting at Book-Cadillac Hotel.
14-15—**Syracuse, N. Y.** New York State Dealers' Association Convention.
16-25—**London, England.** Olympia Motor Show.
22-24—**Pittsburgh, Pa.** Society of Automotive Engineers transportation meeting.

NOVEMBER

4- 7—**Chicago Ill.** National Tire Dealers' Association Convention.
6-16—**Berlin, Germany.** International Automobile Show.
8-15—**Chicago, Ill.** Automobile Salon at Drake Hotel.
10-14—**Cleveland, O.** Motor and Equipment Association Show.
13-23—**Paris, France.** Commercial Vehicle Salon.
17-21—**Cleveland, O.** National Standard Parts Association Show.
30-Dec. 6—**New York.** Automobile Salon at Hotel Commodore.

DECEMBER

6-17—**Brussels, Belgium.** Automobile Exhibition.

JANUARY

3-10—**New York.** National Automobile Show.
24-31—**Chicago, Ill.** National Automobile Show.

FEBRUARY

7-14—**Los Angeles, Cal.** Automobile Salon.
21-28—**San Francisco, Cal.** Automobile Salon

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Highest Prices. Cash.
Quick Action. Any Quantity.
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MERCHANDISING
ACCESSORIES
EQUIPMENT

WHOLESALE

DISTRIBUTION
SHOP EQUIPMENT
REPLACEMENTS

DAILY NEW YORK TRIP SERVES TRENTON JOBBER'S PATRONS

Special Messenger Averages 18 Orders Each Day for Replacement Parts Not Carried In Stock, Saving Big Extra Inventory.

By K. H. LANSING

"SATISFACTORY service is the key to such success as we have made," say the Uferts, of the Uferts Auto Parts Service, Inc., 23-25 Barnes St., Trenton, N. J., "and an important point is that we never run opposition to the garage man, the way some other automotive replacement parts wholesalers do.

"He is a valuable customer and, instead of taking business away from him in our machine shop, when we sell parts for either passenger cars or trucks, we turn the work to be done on them over to him and he appreciates it. In our shop, however, we do rebabbitting, as we were the first to start this work here; we also do rod aligning, fitting piston pins and relining brake bands for the garageman, but he positively must bring in his bands if he wishes us to do the work. These operations cover all the work done in our shop."

The most novel feature of the Ufert service, however, is its "Daily New York Messenger Service for Genuine Automobile Parts." The concern employs one man whose sole duty is filling orders for customers who quickly must have parts, ordinarily those that are not standard, which are not to be obtained in Trenton. The house, which covers Trenton and a radius of twenty-five miles therefrom, has trained its customers all over this area to telephone in their needs of this kind as early as possible. The messenger each morning takes the 11 o'clock railway express to New York and goes about among the warehouses of car dealers there, picking up the required articles. He returns the same evening at 7:30, thus filling the customers' orders in a few hours for stock otherwise unobtainable without considerable delay and expense. The messenger averages no less than eighteen such orders a day, covering a wide range of classifications of parts, and the house, through this plan, is saved an extra inventory of from $25,000 to $35,000 annually. As it is, the stock the concern handles inventories $50,000. The charge to the customer for the messenger service is only $1, plus the price of the part ordered.

The special order blank presented by the messenger to the warehouse in New York, is drawn up as follows:

Order No.....For.....Garage Phones: 2-1171, 2-1172, 2-1173

DAILY

NEW YORK MESSENGER SERVICE
for GENUINE AUTO PARTS

To..... Ufert Auto Parts Service, Inc.
25 Barnes Street,
Trenton, N. J.

Kindly execute the following order at best trade discount

UFERT AUTO PARTS SERVICE, INC.

Signed.....

"Every day the messenger has a long list of orders for our customers," it was explained, "and he never has a day off and never gets a vacation unless he fights for it."

A boy does nothing but meet motorbuses with parcels of parts to be shipped thereby to the various outlying points in the territory covered, and as there about a dozen bus lines leaving Trenton daily he is kept busy. All this is for quick service to customers. When the garageman or the repair shop operator needs a part he usually needs it in a hurry, and his business is pretty sure to go to the house that takes extra care in seeing that he gets quick deliveries.

The concern, which operates a 100 per cent. replacement parts business, carries electrical repair parts, as well as the usual run of parts for both passenger cars and trucks, and has been doing business in Trenton for the last twelve years. While there are fifteen men on the pay roll, the house gets along well in the selling with but two outside salesmen, who are real contact men, and six counter men. The salesmen are paid on a straight salary basis.

Among the many lines carried are, for example, Thompson valves, Victor gaskets, S. K. F. bearings, Timken bearings, Powell mufflers, Lemco axles, American Hammered piston rings, Lemco piston rings, Dayton fan belts, Thermoid, Johns-Manville and United States asbestos brake linings; Republic and Textolite gears, which, by the way, are sold, but not installed; Packard electric repair parts, and Colgate glycerine.

The machine shop is on the second floor and here one man and a helper perform the entire operation of rod aligning on a Shoemaker outfit. In front of them are rows of wooden bins, in which is kept a considerable stock of rods, and the exchange basis is in operation.

It is the opinion of the house that a careful buyer should have but little obsolescent stock on hand at any given time, and that by buying from the better type of manufacturers of standard parts, this condition can be materially aided, as most of them are very reasonable about exchanging slow-moving parts for those that can be turned over more rapidly. One man who knows the stock thoroughly, goes over it and checks it carefully twice each week, which is considered an important means of keeping down obsolescent stock. If rushed, he may assign to one man, or boy, the checking of orders in one stock at a time, only. This constant checking system serves to prevent losses of sales through not having the right stock on hand and is considered much more practical in its results than the use of a perpetual inventory, which is deemed perhaps perfect in theory, but which is seldom followed up to the moment when left to an employee. The perpetual inventory was tried, but abandoned in favor of the frequent checking system. Once a year, a very careful physical inventory of all stocks is taken. The same man is always detailed to do the checking twice a week.

Keeping up the inventory, so that the goods will be on hand when wanted; keeping down obsolescents and making quick deliveries as an important part of the service, are points stressed by this house, which maintains a warehouse next to its main store, for the larger parts and reserves of all stocks.

Editor's Column

DURING the past few years much has been said and more has been printed about research in the automotive industry. Out of all this has come a plan which probably will produce the best results for the money spent.

In the near future, the Bureau of Foreign and Domestic Commerce of the United States Department of Agriculture will mail a questionnaire to a list of retail dealers. The individual answers will be held in complete confidence, but the data secured will be compiled and tabulated in such a manner as to make it of the greatest value to the industry.

The work will be under the direction of thoroughly trained and competent men. Knowledge gained from similar work, done in the past in other industries, will be drawn upon to increase the value of this research.

Only one thing is needed to make the survey of the utmost value to every one in the industry, and that is the full co-operation of each dealer who receives a questionnaire blank. It is necessary that he answer each question fully and accurately. He should give actual facts, rather than guesses and opinions. It is also important that the promptest possible attention be given to the matter and that the questionnaire be filled out and returned immediately.

One of the reasons why the cost of distribution has gone up while the cost of production has gone down is that there is a great lack of facts in regard to distribution, while there is an abundance of facts relating to production.

This survey is a step in the right direction. It will accumulate facts that every retailer, every wholesaler and every manufacturer can use to increase the volume of business done. More effective plans for the future can be made and net profits assured.

THAT an upturn in business will be evident by fall appears to be the general opinion of manufacturer and jobber members of the Motor and Equipment Association, according to M. L. Heminway, managing director, who has compiled results of a questionnaire sent to all members of the association.

The questionnaire asked members to report on the status of their business during the first five months of this year, as compared with the average for the first five months of the past three years, and their opinion as to business for the third quarter of this year, as compared with the same period during the three past years.

Out of 174 manufacturing members reporting, 37 per cent. reported their business for the first five months above the average for the past three years, 15 per cent. indicated that it was slightly below the average, and 48 per cent. reported sales distinctly below the five months' average. Most of the 48 per cent. said that the decrease was more than seasonal. On the other hand, 9 per cent. of those reporting said that their sales for this period were from 15 to 100 per cent. over the three-year average. Opinion as to sales for the third quarter was about equally divided, some foreseeing a rise, others no rise, but, in general, most agreed that fall would see a change for the better.

In the jobber group, out of 104 reporting, one-third have sales above the three-year average for the first five months and two-thirds are under their average. They are evenly divided on prospects for the third quarter, but most think improvement will be noticeable by fall, especially those in agricultural states.

Raising Two Sales Where Only One Grew Before

George Brosch, manager of the automotive merchandising and marketing division of the Business Training Corporation, presents another of his short talks on successful service salesmanship.

By George BROSCH

"I SEE that the running board of your car is wearing rather badly," said a salesman in a New York repair shop; "perhaps you'd like to put on a set of step plates. They'll save the appearance of the car from being spoiled. Let me show you how well they'll look on your car."

It required little effort for the salesman to make the quick observation that resulted in this suggestion. Every automotive salesman has dozens of similar chances every day. There is some unfilled need in every car you see—something the owner has forgotten to buy, something he has postponed buying, or something of which he is not aware. The car owner is often little more than half conscious of the defects of his car; the motor noise that is so apparent to a trained ear may have developed little by little so that the owner has become accustomed to it by degrees. Yet it may take only a hint to wake him to his need.

"You'll hear that knock more plainly as we take this hill," said a tester in Kansas City to the customer whose car he was examining. "Notice it now?" he asked a moment later, as the knock became more pronounced. "It's a sign that you're not getting the power and pep the engine ought to have. We'll have to check the timing. If that's all right, we'll pull the head and find out what's worng. Don't you think we'd better look into it right away?"

Spotting the Obvious Needs

Practice spotting the obvious needs indicated by the car itself. They will make sales for you. And above all, don't limit yourself to noticing only the things that apply to your own department.

"Besides being profitable in itself," says an automotive merchant in St. Paul, "our service department feeds a lot of business into the accessory department. There is one big reason for that. **The man at the head of the department is as good a salesman as he is a mechanic.** When he has a moment to spare, he looks over the cars in the shop to see what accessories they lack. Then, when the owners come in for their cars, he doesn't have any trouble finding a chance to suggest that they'd get a lot more comfort and convenience and safety out of their cars if they had a spotlight—or whatever it may be that's missing. And he backs that up by offering to take them to the accessory department to see what we can offer them. Of course, it doesn't work every time; but it works often enough to add a lot to our volume of sales."

With summer here, the car owner will welcome the suggestion that it would be a good idea to check up on his cooling system. A little real salesmanship will make him realize the importance of a well-functioning water pump and radiator; and at the same time it may be well to mention the fan, belt, fan pulley bearing, and water hose connections.

Winter or summer, cars owners will buy, on their own initiative, some of the accessories and service jobs that the season calls for. How much more would they buy if every automotive salesman made it a regular practice to call attention to seasonal needs? Nobody knows; it has never been tried. Familiar as the idea sounds to any experienced salesman, and unquestionable as it certainly is, only a fraction of the automotive salesmen in the United States and Canada are using it consistently, year in and year out.

Plenty of salesmen know that they should call attention to seasonal needs. But it is action that makes sales, not knowledge. Check up your own selling methods by asking yourself one question: "How many times, on rainy days, do I ask my customers if they have windshield wipers in good working condition?" The salesmen of a retailer in Milwaukee have tripled their sales on windshield wipers by putting this simple method into effect.

Suggesting Related Needs

Another easy and effective method of creating more sales is to suggest items and operations that are naturally related to the customer's first purchase. Most automotive salesmen, presumably, are aware of the importance of this, but investigation shows that only one salesman in six is actually doing it. The men who are using this method, naturally, are making far more sales than the salesmen who leave the initiative entirely in the hands of the customer.

"When a car owner comes in to buy a cylinder head gasket," says a parts salesman in a Baltimore service station, "I know that nine times out of ten he is grinding his own valves. That means I can usually sell him some valve grinding compound. Almost always I can sell him a bottle of shellac for the gasket, too. When that's settled, I suggest that probably some of his valves are burned out, in which case it won't pay to grind them. Lots of times he'll say he's pretty sure he won't need any new valves, but I tell him he'd better take along a set anyhow, and that if there are any that he doesn't need he can bring them back. But the valves never come back."

Here's another example of this sort of creative selling. A motorist drove into a garage in Seattle to see about having a leaking water pump repaired.

"Certainly," said the salesman, raising the hood. He made a careful inspection, then called the customer to his side. "There's your leak, sir—right down there in the packing. We can put in a new one for you that will stop it. But, say," he stopped short while he eyed a steady dripping on the floor, "did you know your radiator was leaking, too?" The customer admitted that he had suspected it. "Not much use to stop the leak in your pump, you know, unless we plug this one, too. Don't you think we'd better take your radiator off, while we are at it, and solder it up?" The customer agreed, and the salesman increased a small service job to one that was really worth while.

Selling by suggesting related operations can be made even more effective when there is a definite and systematic plan behind it, as there is in a general garage in Dallas.

"When a customer has been giving us his business fairly regularly," says the proprietor, "the floor man, or possibly the porter who gets his car for him, will tell him that we'd like to get his car-washing business—and he may add something about our having modern washing equipment. This may be all he says right then, depending on the customer's attitude. But after a week or so, some one else will say something about car washing, and will point out the fact that we can do the job at night, when his car is idle. Then, about the next time the customer drives in at night, with a dusty or a muddy car, the floor man will ask if we may wash it—and usually the customer agrees.

"Then the salesman will ask him if he doesn't want it polished and greased at the same time, and as a rule the customer will O. K. that, too.

"The salesman has one more suggestion to improve the appearance of the car, and that is to apply a coat of top dressing; and he brings out the point that it will preserve the top, too. In many cases the salesman is able to sell the complete job—all four operations. We have a special price to cover them when they're all ordered at once, and we also have a monthly rate to maintain this service permanently.

Sells Lubrication Through Postcard Warning System

SERVICE DIVISION CREATES DEMAND IN EFFECTIVE WAY

Customers of Philadelphia Firm Appreciate Check-Up on Cars

By K. H. LANSING

LUBRICATION at present constitutes one of the outstanding servicing operations on customers' cars, according to dealers and distributors in the Philadelphia territory, the average motorist paying heed to the almost constant reiteration of the agencies, and the oil companies in their national advertising, of the need for frequent oiling and greasing to keep the automobile in its best running condition and stave off expensive repairs.

According to Elliot J. Goldman, general manager, secretary and treasurer of the Wilkie Buick Co., 1,400 North Broad St., Philadelphia, the demand for lubrication is materially increasing among its clientele and the company's two-car space for this phase of the service is occupied the major part of each day. Two men are employed in the lubrication division and extra men from the department are detailed to help out in emergencies.

* * *

THE service manager has charge of oiling and greasing. Close track is kept of the quantities used. No oil is drawn except on requisition. Invader oil and Alemite are the commodities used in this section. Monthly records in the hands of the service manager show just how much oil has been used for the period. The number of cars handled and the number of drums of grease are checked against the quantity used.

A simple, yet effective system of bringing the car owner into the service station for high pressure lubrication of his vechicle at frequent intervals is employed by the company. This consists of three ordinary, standrad-size postcards, the first two printed in black on the message side and the last—a "danger" signad—printed in red and vertically set up, in contrast to the horizontal arrangement of the first two cards, so that it will especially attract notice.

The first card is mailed to the customer right after the car has been lubricated and is accompanied by a lettter of thanks. This card reads as follows:—

> **WILKIE BUICK means**
> **BETTER BUICK SERVICE**
> To receive full satisfaction from your Buick, have it lubricated at the proper mileage intervals. Let us take care of your lubrication with our new complete and up-to-date Alemite System.
> **WILKIE BUICK CO., 1400 North Broad Street.**
> **BETTER BUICK SERVICE**

THIS same form of card is so worded that it is appropriate to send to the customer immediately after his purchase of a Buick automobile, and this is done, but its use does not stop there and the three-card system is used over and over again for the same customer, as a series of reminders to bring the car into the station.

The sceond card in the series is mailed about one week after the car has been brought in and lubricated, or more precisely, when it is calculated that its owner must have driven it about 500 miles. This card reads:

> **HOME OF BETTER BUICK SERVICE** . . . . . **When Your SPEEDOMETER Reads**.....
> It is time to bring your car in for Alemite Lubricating. This is your best insurance against depreciation and wear and the best means of avoiding costly repairs. Drive in today and let use prepare your car for another 500 miles of economic service.
> **WILKIE BUICK CO., 1400 North Broad Street**
> **BETTER BUICK SERVICE**

IF the customer fails to bring in his car one week after the sending out of the second card, a brief letter is mailed, calling his attention thereto. If he does not bring it in a week after the letter has been sent, the third, or "danger" card is then mailed.

This card says:

> **BEWARE!** . . . . . **your car may be in**
> **D A N G E R**
> Several days ago we suggested that your car may need lubrication. Perhaps your speedometer has not reached .....
> If it has, drive in without delay. Alemite regularly to prevent trouble and costly repairs.
> **WILKIE BUICK CO.,**
> **1400 North Broad Street.**
> **BETTER BUICK SERVICE**

THE service department as a whole, according to Mr. Goldman, is very active and the shop is a profitable one. Fifty men are employed in this division, and the special operations, aside from general mechanical repair work, cover upholstering, metal and woodwork, polishing, simonizing and lubrication. Electric machines of small size are installed in both the new and the used car departments, those in the latter section being used for reconditioning work.

CLARK

CLARK AXLES and METAL WHEELS

fulfill the rigid requirements of the larger truck and passenger car manufacturers. Built in a plant with large production capacity.

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AXLES
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WHEELS
Single or Dual Tire
CAST STEEL HOUSINGS
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Motor Trucks as Factors In Marketing Is Studied

WASHINGTON, Aug. 14.—Effects of the use of motor trucks in transporting farm produce upon the farm marketing system in the United States is being studied by the Bureau of Agricultural Economics in the Department of Agriculture.

The survey is being made for the purpose of determining the importance of truck receipts of the fruit and vegetable supply in some of the leading market centers, and to ascertain the volume of truck movements as compared with movements by rail and boat from representative producing areas.

It will determine also the situation with regard to the redistribution of produce from the large market centers to smaller communities in their trade areas.

Preliminary surveys have brought out that many farmers who formerly hauled or shipped produce to market centers now sell direct to itinerant so-called truckmen—merchants who buy supplies on speculation and either haul to a consuming market within a 200 to 300 mile radius or peddle their loads in small towns or rural districts.

It is claimed that their activities have an unsettling effect in market centers, and tend to depress prices. Indications are that in many instances they make it possible for producers to sell products of a grade and condition which it would be impracticable to ship by rail.

The bureau is compiling dairy motor truck receipts at several markets to ascertain the volume and sources of trucked-in supplies. An attempt will be made to estimate approximately the proportion of truck receipts from market garden areas formerly hauling products to market by wagon, and to ascertain the attitude of the wholesale trade to the trucking business and the effect of trucking on market conditions.

Los Angeles Dealers Make Good Showing in July

Los Angeles, Aug. 14.—There is a distinctly optimistic feeling along automobile row, not only because of the business transacted during July, but also because of the bright outlook for this month and the fall months. Many distributors reported July showed an increase over June, and one distributor even attained a great increase over the same month in 1929.

"July was about the same as June," stated F. P. Ubing, passenger car sales manager for the Thompson-De Jarnette Company, Dodge distributor. "July, 1930, was greatly off the same month in 1929. We will be happy if August stays as good as July.

"Used cars are moving very well and continue about the same from month to month. We find that all it needs to dispose of our stocks at any time is merely to put forth a little more effort."

H. F. Wood, assistant to L. R. Spencer, sales manager for Earle C. Anthony, Incorporated, Packard distributor, reported that July was not as great as June, but that it greatly exceeded July, 1929. August, he said, is starting off very nicely, with prospects of a good month. The used car situation is in good shape, with prices holding up very well. During the summer months they found a marked demand for low-priced cars for vacationing, and expect a better market for higher-priced cars during the fall.

"Our new car sales for July were up about one-third or one-fourth over June," stated H. Getchal, sales manager for the Pelton Motor Company, Marmon-Roosevelt distributor. "However, it was off July, 1929. The outlook for August is very bright. While it is a buyers' market and they are trying to drive hard bargains, there is a lot of activity.

"Prices of used cars are off slightly. There is a great deal of activity in medium priced cars."

"Consistently leading in Los Angeles registrations in all but the lowest price class, according to official records." That has been the mark hung up by De Soto sixes and eights, as reported by William E. Bush, Inc., local direct De Soto dealer.

"During the month of July there was hardly a single day that Los Angeles registrations did not show De Soto leading all but the very lowest priced automobiles," declared Mr. Bush. "Our business and that of our associate dealers has been steadily on the increase since the first of the year."

"Our July new car sales were away off June," stated Ralph Hamlin, president of Franklin Motors, Inc., Franklin distributor. "However, June was an exceptionally good month. Sales during July, due to the Fourth of July intervening, did not get under way until the twelfth or fifteenth. The month was also off from July, 1929. The immediate future looks very good, judging from the way August has started. Our used cars are in good shape."

Service Notes

Jersey City, N. J., Aug. 14.—The Hudson Oil Company has bought a plot 100x90 feet on the east side of Halladay Street, near Caven Point Avenue, Jersey City, from the Hy-Grade Gasoline and Oil Company, where it will operate a service station.

Port Angeles, Wash., Aug. 14.—Harry P. Cohen, Frank Cohen and M. E. Froman, Port Angeles automotive parts and accessory dealers, have incorporated the Automotive Parts Company of Port Angeles.

Council Bluffs, Ia., Aug. 14.—The Griffen Wheel Works has named T. C. Weiser, Boston, Mass., plant superintendent. He succeeds F. J. Head, transferred to St. Paul, Minn.

Portland, Ore., Aug. 14.—John E. Houston has purchased the interest of Arthur Dubey in the firm of Thompson & Dubey, brake specialist, at 12th and Couch Streets. The firm will continue to operate under the same name. Thompson & Dubey was founded four years ago, and since that time has obtained the state distributorship for Gabriel shock absorbers, Pines winter fronts, Tropicaire heaters and Velve-Cyl oilers.

SEIBERLING REPORTS 24% SALES GAIN IN JULY

Akron, O., Aug. 14.—A sales increase of 24 per cent. for the month of July over June is reported by the Seiberling Rubber Company, and this plant is now working three shifts twenty-four hours a day, six day a week, in order to keep up with the present large demand for Seiberling tires, according to F. A. Seiberling, president of the company.

Seiberling points to the July sales increase as indicative of a distinct upward trend in tire buying, although this factory, in company with others in the industry, shows a lower total for the first six months of 1930 than for the same six months period in 1929.

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Built just the way you would like to build them for your own use.

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Cumulative New Commercial Car Registration Statistics, July, 1930

States	Autocar	Brockway-Indiana	Chevrolet	Diamond-T	Dodge	Essex	Fargo	Federal	Ford	G. M. C.	International	Mack	Paige	Relay	Reo	Republic	Rugby	Sterling	Stewart	Studebaker	Whippet	White	Willys	Willys-Knight	Miscellaneous	Totals	States
Illinois	5	16	516	41	50		2	14	874	34	110	17	2		19	2		8	1		8	21	21		60	1821	Illinois
Ill., 1929	12	14	791	88	159	*	27	12	1149	49	195	31	*	2	46	1		10	3		51	23	*		124	2787	Ill., 1929

*Not in production at that time.

At the commencement of its 6th year Automotive Daily News presents its

Annual Review and Reference Number--AUGUST 27TH

WE feel quite confident that the effort we will make to gather data for this important number will result in one of the most valuable issues ever published. With a *distribution* of over *30,000 COPIES,* the size of the issue will be limited, so that we can assure every advertiser that his *copy will not be buried* in a bulky publication.

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Regular subscribers (A. B. C. net paid)	Over	10,000
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Wholesalers of accessories, parts, shop equipment	Over	2,000
Retailers of accessories and parts	Over	4,000
Engineers, production men, etc	Over	4,000
Wholesalers and retailers of trucks exclusively	Over	2,000

EDITORIALLY the issue will cover a review of every basic branch of the industry; there will be valuable data for every dealer, jobber, truck fleet owner and factory executive. Reference matter will include the latest registrations of passenger cars and trucks in all states, and complete six months figures.

¶ Opinions of leading engineers, production men, sales managers, manufacturers of all kinds, jobbers, retailers, fleet owners, etc., will make this issue one of the most complete of its kind ever presented to the automotive industry.

¶ News of the day, of course.

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MAJOR SPECIFICATIONS AND MECHANICAL DETAILS OF

Make and Model	Capacity—Tons	Chassis Price	Engine	No. of Cyl.	Bore and Stroke	Tax H. P.	Oil System	Carburetor	Fuel Feed	Ignit. System	Gear Set	Location	No. Spds. For.	Rear Axle	Final Drive	Reduction in Low	Brakes, Foot	Brakes, Hand	Standard Wheel Base	Chassis Weight	Standard Tire Sizes Front	Rear
Am. La France Chief	2	3650	Own	6	3¾x5	33.0	Pw	Str	Vac	DR	Own	C	4	Tim	Wo	31.2	4	D	156	6200	32x6	32x6D
Am. La France W	3-4	3950	Own 2 R	4	4¼x6	28.9	CS	Zen	Vac	AB	Own	C	4	Own	2R	47.4	4	R	160	7200	S36x5	S36x5D
Am. La Fran. Chieftain	3-4	5500	Own	6	4⅛x5⅛	40.8	Pw	Zen	Vac	DR	Own	C	4	Tim	Wo	28.8	4	D	175	7200	S36x8	36x8D
Am. La France V	5	5500	Own 5 R	4	4¾x6	36.2	CS	Zen	Vac	AB	Own	C	4	Own	Wo	54.4	4	R	165	9800	S36x5	S40x6D
Am. La Fran. Big Chief	6	6725	Own	6	4½x6	48.6	Pw	Zen	Vac	DR	Own	C	4	Own	2R	32.8	4W	D	226	10600	S40x8	S40x8D
Am. La France Z	6½	5750	Own 5 R	4	4¾x6	36.2	CS	Zen	Vac	AB	Own	C	4	Own	Wo	63.5	4	R	165	10000	S36x7	S40x7D
Am. La France U	7½	6000	Own 5 R	4	4¾x6	36.2	CS	Zen	Vac	AB	Own	C	4	Own	—	63.5	4	R	165	10500	S36x7	S40x8D
Austin	—	*499	Own	4	2.2 x3	7.8	—	Til	—	Aut-L	W-G	U	3	Sal	Sp	—	[illegible]	4	75	——	3.75x18	3.75x18
Autocar A	1½-2	2700	Own	6	4 x4¾	38.4	Pw	Str	Vac	DR	Br-L 51	U	4	Own SA	Sp	27.9	4	R	150	5060	32x6	32x6
Autocar D	2-2½	3000	Own	6	4 x4¾	38.4	Pw	Str	Vac	DR	Br-L 51	U	4	Own SD	2R	33.7	4	R	150	5300	32x6	32x6D
*Autocar SH	2½-3	4300	Own	6	4¼x4¾	43.4	Pw	Str	Gra	RB	Own T	U	4	Own H	2R	44.3	R	R	114	6770	34x7	34x7D
Autocar SCH	2½-3	4300	Own	6	4¼x4¾	43.4	Pw	Str	Vac	RB	Own T	U	4	Own H	2R	44.3	R	D	157	6860	34x7	34x7D
*Autocar H	3	4100	Own	4	4½x5½	32.4	CS	Str	Gra	AB	Own T	U	4	Own H	2R	48.6	R	R	114	6770	34x7	34x7D
*Autocar HS	3½	4600	Own	4	4½x5½	32.4	CS	Str	Gra	AB	Own T	U	4	Own C	2R	53.6	R	R	114	7900	40x8	40x8D
*Autocar SHS	3-3½	4800	Own	6	4¼x4¾	43.4	Pw	Str	Gra	RB	Own T	U	4	Own C	2R	53.6	R	R	114	7900	40x8	40x8D
Autocar SCHS	3-3½	4800	Own	6	4¼x4¾	43.4	Pw	Str	Vac	RB	Own T	U	4	Own C	2R	53.6	R	D	157	8180	40x8	40x8D
Autocar TEA	3-3½	5350	Own	6	4¼x4¾	43.4	Pw	Str	Vac	RB	Own T	U	12	Own TE	2R	101.7	4	D	192	8900	36x8	36x8D
Autocar TFA	3½-5	6100	Own	6	4½x4¾	48.6	Pw	Str	Vac	RB	Own T	U	12	Own TF	2R	101.3	4	D	192	9300	38x9	38x9D
Autocar C	3½-5	5500	Own	6	4½x4¾	48.6	Pw	Str	Vac	RB	Own B	C	4	Own C	2R	61.7	R	D	172	9500	42x9	42x9D
Autocar F	7½	6800	Own	6	4½x4¾	48.6	Pw	Str	Vac	RB	Br-L 70	C	7	Tim	Wo	94.0	4	D	173	11000	36x7S	40x8DS
Autocar G	10	9000	Own	6	4½x4¾	48.6	Pw	Str	Vac	RB	Br-L 70	C	7	Tim	Wo	97.7	WB	D	171	13000	36x8	36x8D
Brockway 65	1	1195	Con	6	3⅜x4⅝	27.3	Pw	Zen	Vac	Aut	Br-L	U	3	Col	Sp	21.3	4	Tr	137	3400	30x5	30x5
Brockway 75	1¼	1290	Con	6	3⅜x4⅝	27.3	Pw	Zen	Vac	Aut	Br-L	U	4	Col	Sp	25.6	4	Tr	137	3450	32x6	32x6
Brockway 90	1½	1525	Con	6	3⅜x4⅝	27.3	Pw	Zen	Vac	Aut	Br-L	U	4	Col	Sp	25.6	4	Tr	149	3650	32x6	32x6
Brockway 120	2	1990	Con	6	4 x4⅛	38.4	Pb	Zen	P	Aut	Br-L	U	4	Tim	Sp	—	4	Tr	156	5200	32x6	32x6D
Brockway 140	2	2495	Con	6	4 x4⅛	38.4	Pb	Zen	P	Aut	Br-L	U	4	Wis	2R	—	4HV	D	156	5500	32x6	32x6D
Brockway 170	2½	3160	Con	6	4⅛x4¾	40.8	Pb	Zen	P	Aut	Br-L	U	4	Wis	2R	—	4HV	D	170	6800	32x6	32x6D
Brockway 195	3	3820	Con	6	4⅛x4¾	40.8	Pb	Zen	P	Aut	Br-L	U	4	Wis	2R	—	4HV	D	170	7500	34x7	34x7D
Brockway 190	3	4185	Con	6	4⅛x4¾	40.8	Pb	Str	P	Aut	Br-L	C	7	Tim	Wo	—	RV	D	168½	7625	34x7	34x7D
Brockway 220	3½	4560	Con	6	4⅜x4¾	45.9	Pb	Zen	P	Aut	Br-L	U	4	Wis	2R	—	4HV	D	170	8200	36x8	36x8D
Brockway 250	5	5950	Con	6	4⅜x4¾	45.9	Pb	Str	P	Aut	Br-L	U	4	Tim	Wo	—	4HV	D	182	10000	40x8	40x8D
Brockway 290	7½	7250	Con	6	4¾x5¾	54.15	Pw	Str	P	L-N	Br-L	C	7	Tim	Wo	—	4W	D	182	10750	38x7	40x14S
Brockway 640	10	9700	Con	6	4¾x5¾	54.15	Pw	Str	P	L-N	Br-L	C	7	Tim	Wo	—	4W	R	212	14000	38x7	36x10S
Chevrolet	½	365	Own	6	3⅛x3¾	26.3	CS	Car	P	DR	Own	U	3	Own	Sp	13.61	4	R	107	1835	4.75x19	4.75x19
Chevrolet	1½	520	Own	6	3⅛x3¾	26.3	CS	Car	P	DR	Own	U	4	Own	Sp	33.46	4	R	131	2375	30x5	30x5
Commerce Series S 11	1	1600	Bud H S 6	6	3⅜x4½	27.3	Pb	Zen	Vac	Aut	Br-L 20	U	4	Col 54028	Sp	25.5	4	D	142	3900	30x5P	30x5P
Commerce Series 40	1½	2990	Bud D S 6	6	3⅝x5	31.5	Pb	Zen	Vac	Aut	Br-L 35	U	4	Tim 63702	Wo	34.8	4		168	4700	34x5P	34x5D
Commerce Series S 11	2	2030	Bud H S 6	6	3⅜x4½	27.3	Pb	Zen	Vac	Aut	Br-L 20	U	4	Tim 54006	Sp	29.2	4		162	4500	32x6P	32x6D
Commerce Series 40	2	3240	Bud D S 6	6	3⅝x5	31.5	Pb	Zen	Vac	Aut	Br-L 35	U	4	Tim 63702	Wo	34.8	4		168	4900	36x6	36x6D
Commerce Series 40	2½	3240	Bud D S 6	6	3⅝x5	31.5	Pb	Zen	Vac	Aut	Br-L 35	U	4	Tim 63702	Wo	34.8	4		168	5100	36x6P	36x6D
Commerce Series 60	2½	4580	Bud B A 6	6	4⅛x5⅛	40.8	Pb	Zen	Vac	Aut	Ful	U	5	Tim 65706DH	Wo	63.0	4		175	7000	36x6P	36x6D
Commerce Series 60	3	4680	Bud B A 6	6	4⅛x5⅛	40.8	Pb	Zen	Vac	Aut	Ful	U	5	Tim 65706DH	Wo	63.0	4		175	7100	36x6P	36x6D
Commerce Series 80	3½	5250	Bud B A 6	6	4⅛x5⅛	40.8	Pb	Zen	Vac	Aut	Br-L	C	7	Tim 66700DP	Wo	98.2	B		175	8200	36x6S	36x12S
Commerce Series 80	4	5330	Bud B A 6	6	4⅛x5⅛	40.8	Pb	Zen	Vac	Aut	Br-L	C	7	Tim 66700DP	Wo	98.2	B		175	8400	36x6S	36x12S
Commerce Series 100	5	5830	Bud B A 6	6	4⅛x5⅛	40.8	Pb	Zen	Vac	Aut	Br-L	C	7	Tim 68700DP	Wo	95.0	B		175	9600	36x6S	40x14S
Day Elder 60	1	1195	Con 25 A	6	3⅜x4	27.3	Pw	Zen	P	DR	W-G	U	4	Tim	Sp	36.3	4	D	135	3200	20x6.50B	20x6.50B
Day Elder 85	1½	1645	Con 16 C	6	3⅜x4⅝	27.3	Pw	Zen	P	DR	W-G	U	4	Tim	Sp	42.3	4	D	135	3750	20x6B	20x6.50DB
Day Elder 110	2	2095	Con 16 C	6	3⅜x4⅝	27.3	Pw	Zen	P	DR	Br-L	U	4	Tim	Sp	36.4	4	D	156	4200	20x7B	20x7DB
Day Elder 130	2½	2895	Con 16 R	6	4 x4⅛	33.4	Pw	Zen	P	DR	Br-L	U	4	Tim	Sp	33.0	4	D	150	5300	20x7.50B	20x7.50Db
Day Elder 160	3	3695	Con 18 R	6	4 x4½	33.4	Pw	Zen	P	DR	Br-L	U	4	Tim	Wo	36.1	4	D	156	6900	20x7.50B	20x9DB
Day Elder 200	4	4295	Con 18 R	6	4 x4½	33.4	Pw	Zen	P	DR	Br-L	U	4	Tim	Wo	43.5	4	D	156	7500	20x9B	20x9DB
Day Elder 240	5	5500	Con 21 R	6	4⅜x4¾	45.9	Pw	Zen	V	DR	Br-L	C	4	Tim	Wo	50.8	4	D	162	9200	38x9P	38x9DP
Day Elder 285	8	6000	Con 21 R	6	4⅜x4¾	45.9	Pw	Zen	V	DR	Br-L	C	7	Tim	Wo	71.2	6	D	164	10000	20x8.25B	20x8.25Db
Day Elder 345	10	7500	Con 21 R	6	4⅜x4¾	45.9	Pw	Zen	V	DR	Br-L	C	7	Tim	Wo	79.9	4	D	164	11700	20x9B	20x9DB
Day Elder 402	12	8500	Con 16 H	6	4¾x5¾	54.2	Pw	Zen	P	DR	Br-L	C	7	Tim	Wo	84.6	4	D	164	12800	20x9.75B	20x9.75Db
Diamond T 200	1	785	Bud	4	3¾x4½	22.5	Pw	Zen	P	Aut	W-G	U	4	Cla	Sp	—	4	D	128½	3050	30x5	30x5
Diamond T 215	1	885	Bud	6	3⅜x4	27.3	Pw	Zen	P	Aut	W-G	U	4	Cla	Sp	—	4	D	135⅛	3150	30x5	30x5
Diamond T 290	1½	1475	Her WXA 2	6	3½x4½	29.4	Pb	Zen	Vac	Aut	Cov	U	4	Col	Sp	—	4	D	156¼	4160	30x5	30x5D
Diamond T 303	2	1745	Her WXB	6	3¾x4½	33.7	Pb	Zen	Vac	Aut	Cov	U	4	Tim	Sp	—	4	D	160¾	4850	32x6	32x6D
Diamond T 551	2½	2250	Her WXC	6	4 x4½	38.4	Pb	Zen	Vac	Aut	Cov	U	4	Tim	Sp	—	4	D	168	5600	32x6	32x6D
Diamond T 503	2½	2660	Her WXC	6	4 x4½	38.4	Pb	Zen	Vac	Aut	Cov	U	4	Tim	Wo	—	4	D	174	6200	34x7	34x7D
Diamond T 506	2½	2820	Her WXC	6	4 x4½	38.4	Pb	Zen	Vac	Aut	Cov	U	4	Wis	2R	—	4	D	172½	6300	34x7	34x7D
Diamond T 602	3	3440	Her YXC	6	4⅜x4¾	45.9	Pb	Zen	Gra	Aut	Cov	C	4	Tim	Wo	—	4	D	169½	7500	36x8	36x8D
Diamond T 606	3	3500	Her YXC	6	4⅜x4¾	45.9	Pb	Zen	Gra	Aut	Cov	U	4	Wis	2R	—	4	D	186	7500	36x8	36x8D
Diamond T 700	3½	3740	Her YXC	6	4⅜x4¾	45.9	Pb	Zen	Gra	Aut	Cov	C	4	Tim	Wo	—	R	D	162	8100	S36x5	S36x10
Diamond T 801	4	4140	Her YXC	6	4⅜x4¾	45.9	Pb	Zen	Gra	Aut	Br-L	C	7	Own	Wo	—	6WH	D	189½	8300	36x8	4 wh 36x8
Diamond T 1000	5	4420	Her YXC 2	6	4½x4¾	48.6	Pb	Zen	Gra	Aut	Br-L	C	4	Tim	Wo	—	R	D	170½	9700	S36x6	S40x12
Diamond T 1200	6	5600	Her YXC 2	6	4½x4¾	48.6	Pb	Zen	Gra	Aut	Br-L	C	7	Tim	Wo	—	4RW	D	180	11000	34x7	4 w h 34x7D
Diamond T 1600	8	6220	Her YXC 3	6	4⅝x4¾	51.3	Pb	Zen	Gra	Aut	Br-L	C	7	Tim	Wo	—	4RW	D	190	11700	36x8	4 wh 36x8D
Diamond-T 1601	8	7500	Wak 6 R B	6	5 x5¾	60.0	Pb	Zen	Gra	Mag	Br-L	C	7	Tim	Wo	—	4RW	D	194	12500	36x8	4wh 36x8D
Diamond T 2500	10-12	8000	Wak 6 RB	6	5 x5¾	60	Pb	Zen	Gra	Mag	Br-L	C	7	Tim	Wo	—	4RW	D	194	13100	S36x7	4 wh 36x12S
Dodge Bros. U-1	½	545	Own	4	3⅝x4¼	21.3	Pb	Car	Vac	NE	Own	U	3	Own	Sp	14.28	4	D	109	1900	5.00x20B	5.00x20B
Dodge Bros. U-1	¾	695	Own	4	3⅝x4¼	21.3	Pb	Car	Vac	NE	Own	U	3	Own	Sp	21.68	4	D	124	2260	5.50x20B	5.50x20B
Dodge Bros. DA1	¾	795	Own	6	3⅜x3⅞	27.3	Pb	Zen	Vac	NE	Own	U	3	Own	Sp	19.21	4	D	124	2360	5.50x20B	5.50x20B
Dodge Bros. U-1	1	795	Own	4	3⅝x4¼	21.3	Pb	Car	Vac	NE	Own	U	4	Own	Sp	36.13	4	D	133	2590	6.00x20B	32x6
Dodge Bros. DA1	1	895	Own	6	3⅜x3⅞	27.3	Pb	Zen	Vac	NE	Own	U	4	Own	Sp	33.45	4	D	133	2690	6.00x20B	32x6
Dodge Bros. DA1	1	1095	Own	6	3⅜x3⅞	27.3	Pb	Zen	Vac	NE	Own	U	4	Own	Sp	36.83	4	D	140	2955	30x5	30x5
Dodge Bros. DA1	1½	1365	Own	6	3⅜x3⅞	27.3	Pb	Zen	Vac	NE	Own	U	4	Own	Sp	36.83	4	D	150	3695	32x6	32x6
Dodge Bros. DA1	1½	1415	Own	6	3⅜x3⅞	27.3	Pb	Zen	Vac	NE	Own	U	4	Own	Sp	36.83	4	D	165	3810	32x6	32x6
Dodge Bros. DB1	2	1595	Own	6	3⅜x4½	27.3	Pb	Zen	Vac	NE	Own	U	4	Own	Sp	36.83	4	D	150	3930	32x6	34x7
Dodge Bros. DB1	2	1645	Own	6	3⅜x4½	27.3	Pb	Zen	Vac	NE	Own	U	4	Own	Sp	36.83	4	D	165	4070	32x6	34x7
Dodge Bros. DB1	3	1845	Own	6	3⅜x4½	27.3	Pb	Zen	Vac	NE	Own	U	4	Own	Sp	46.31	4	D	135	4235	32x6	32x6D
Dodge Bros. DB1	3	1895	Own	6	3⅜x4½	27.3	Pb	Zen	Vac	NE	Own	U	4	Own	Sp	41.43	4	D	165	4520	32x6	32x6D
Dodge Bros. DB1	3	1945	Own	6	3⅜x4½	27.3	Pb	Zen	Vac	NE	Own	U	4	Own	Sp	46.31	4	D	185	4715	32x6	32x6D
Durant	¾	495	Con	4	3⅜x4¼	18.2	Pb	Til	Vac	Aut	Own	C	3	Own	Sp	16.16	4	4	107	1670	28x4.75	28x4.75
Essex Commercial	¾	445	Own	6	2¾x4½	18.2	CS	Mar	Vac	Aut	Own	U	3	Own	Sp	17.8	4	4	110	2150	30x5	31x5.50
Fargo Packet	½	545	Own	6	3 x4⅛	21.6	Pb	Str	Vac	NE	Own	U	3	Own	Sp	14.29	4	Tr	——	1835	5.00x19	5.00x19
Fargo Clipper	¾	725	Own	6	3⅛x4¼	23.4	Pb	Str	Vac	DR	Own	U	3	Own	Sp	15.53	4	Tr	——	2325	5.50x18	5.50x18
Fargo Freighter	1	795	Own	6	3 x4⅛	21.6	Pb	Str	Vac	NE	Own	U	4	Own	Sp	37.19	4	Tr	——	2785	6.00x20	32x6
Federal E6	1½	1090	Con 17 E	6	3⅜x4	27.3	Pb	Zen	Vac	DR	W-G T9	U	4	Cla B370	Sp	34.6	4	Tr	132	3260	6.00x20	32x6
Federal D	1-1½	830	Con W 10	4	3⅞x4¼	24.0	Pb	Zen	P	DR	W-G T9	U	4	Cla B372	Sp	40.8	4	Tr	131	3185	6.00x20	32x6
Federal F7	1½	1525	Con 16 C	6	3⅜x4⅝	27.3	Pb	Zen	P	DR	Own	U	4	Tim 52005H	Sp	24.3	4	Tr	132	3765	30x5	30x5D
Federal A6	2	1855	Con 16 C	6	3⅜x4⅝	27.3	Pb	Zen	Vac	DR	Own	C	4	Cla B610	Sp	38.5	4	Tr	151	4580	32x6	32x6D
Federal A6T	2½	2185	Con 16 C	6	3⅜x4⅝	27.3	Pb	Zen	Vac	DR	Own	C	4	Tim 58000H	Sp	41.3	4	Tr	151	4950	32x6	32x6D
Federal A 6 T W	2½	2360	Con 16 C	6	3⅜x4⅝	27.3	Pb	Zen	Vac	DR	Own	C	4	Tim 65001 H	Wo	42.0	4	Tr	151	4950	32x6	32x6D
Federal T10R	2½-3	2740	Con 16 R	6	4 x4⅛	38.4	Pb	Zen	P	DR	Own	C	4	Tim 58000H	Sp	36.3	4	Tr	165	6550	34x7	34x7D
Federal T10W	2½-3	2915	Con 16 R	6	4 x4⅛	38.4	Pb	Zen	P	DR	Own	C	4	Tim 65001H	Wo	44.0	4	Tr	165	6550	34x7	34x7D
Federal U6	3-3½	3860	Con 18 R	6	4 x4½	38.4	Pb	Str	P	DR	Br-L 55	C	7	Tim 65706HP	Wo	64.6	4	D	165	7220	34x7	34x7D
Federal 4C6A	4-5	4735	Con 20 R	6	4⅛x4¾	40.8	Pb	Zen	P	DR	Br-L 55	C	7	Tim 66704HP	Wo	73.6	4	D	192	8330	36x8	36x8D
Federal 4C6AB	4-5	4960	Con 20 R	6	4⅛x4¾	40.8	Pb	Zen	P	DR	Br-L 55	C	7	Tim 66704TWP	Wo	73.6	4	D	192	8850	36x8	36x8D
*Federal U 6 S W	6	6000	Con 20 R	6	4⅛x4¾	40.8	Pb	Zen	P	DR	Br-L 55	C	7	Tim S W 200	Wo	71.3	6	Tr	201	9850	34x7	34x7D
*Federal U 6 S W A B	6	6500	Con 20 R	6	4⅛x4¾	40.8	Pb	Zen	P	DR	Br-L 55	C	7	Tim S W 200	Wo	71.3	4	Tr	201	9900	34x7	34x7D
Federal X8	7½	5085	Con B 7	4	5 x6	40	Pw	Zen	Vac	AB	Br-L 60	C	7	Tim 68700DP	Wo	110.9	R	D	162	9750	36x6S	40x14S
Federal X8R	7½	5810	Con 21 R	6	4⅜x4¾	45.9	Pb	Zen	P	DR	Br-L 60	C	7	Tim 68700DP	Wo	110.9	R	D	162	10000	40x8	40x8D
*Federal 4 C 6 S W	8	7500	Con 21 R	6	4⅜x4¾	45.9	Pb	Zen	P	DR	Br-L 55	C	7	Tim S W 300	Wo	80.8	4	Tr	231	11500	36x8	36x8D
Ford AA	1½	520	Own	4	3⅞x4¼	24.0	Sp	Zen	Gra	Own	Own	U	4	Own	St	42.24	4	R	131½	2792	6.00x20	32x6
Ford AA	1½	545	Own	4	3⅞x4¼	24.0	Sp	Zen	Gra	Own	Own	U	4	Own	St	42.24	[illegible]	R	157	2570	6.00x30	6.00x30D
F. W. D.—H	1½	3300	Wis S U	4	4 x5	25.6	Pb	Zen	Vac	Eis	Cotta	C	4	Own	St	38.1	4	R	121	5300	34x7	34x7
F. W. D.—H 6	2	3425	Wak	6	3½x4½	29.4	Pb	Zen	Vac	Eis	Br-L	U	4	Own	St	35.0	4	R	133	5500	34x7	34x7
F. W. D.—BTL 4	2	3900	Wis S U	4	4 x5	25.6	Pb	Zen	Vac	Eis	Br-L	C	7	Own	St	84.7	4	R	120	6000	36x8	36x8
F. W. D.—HH 6	2½	4000	Wak	6	3¾x4½	33.7	Pb	Zen	Vac	Eis	Br-L	C	7	Own	St	101.0	4	R	133	5700	36x8	36x8
F. W. D.—B	3	4200	Own	4	4¾x5½	36.1	Pb	Str	Gra	Eis	Own	C	3	Own	St	35.6	4	R	124	6460	36x6S	36x6S

1930 COMMERCIAL CARS BUILT IN THE UNITED STATES

Make and Model	Capacity—Tons	Chassis Price	Engine	No. of Cyl.	Bore and Stroke	Tax H. P.	Oil System	Carburetor	Fuel Feed	Ignit. System	Gear Set	Location	No. Spds. For.	Rear Axle	Final Drive	Reduction in Low	Brakes, Foot	Brakes, Hand	Standard Wheel Base	Chassis Weight	Standard Tire Sizes Front	Rear
F. W. D.—B 5	3	4525	Own	4	4¾x5½	36.1	Pb	Str	Gra	Eis	Own	C	5	Own	St	88.6	4	R	132	6800	36x6S	36x6S
F. W. D.—B T	3	4742	Own	4	4¾x5½	36.1	Pb	Str	Vac	Eis	Own	C	5	Own	St	101.0	4	R	133¾	7700	40x7S	40x5SD
F. W. D.—U 4	3	4575	Own	4	4¾x5½	36.1	Pb	Str	Vac	Eis	Own	C	5	Own	St	88.6	4	R	148	7000	36x6S	36x6S
F. W. D.—C U 6	3½	5120	Wak	6	4 x4¾	38.6	Pb	Zen	Vac	Eis	Own	C	5	Own	St	88.6	4	R	148	7200	36x6S	36x8S
*F. W. D.—X 6	6	6500	Wak	6	4¼x4¾	43.3	Pb	Zen	Vac	Eis	Own	C	5	Own	St	88.6	*	4	170	9500	36x8	36x8
Garford Series S 11	1	1600	Bud H S 6	6	3⅜x4½	27.3	Pb	Zen	Vac	Aut	Br-L	U	4	Col	Sp	25.5	4	D	142	3900	30x5	30x5
Garford Series S 11	1½	1900	Bud H S 6	6	3⅜x4½	27.3	Pb	Zen	Vac	Aut	Br-L	U	4	Tim	Sp	29.2	4	D	162	4300	30x5	D30x5
Garford Series 40	1½	2990	Bud D S 6	6	3⅝x5	31.5	Pb	Zen	Vac	Aut	Br-L	U	4	Tim	Wo	34.8	4	D	168	4700	34x5	D34x5
Garford Series S 11	2	2030	Bud H S 6	6	3⅜x4½	27.3	Pb	Zen	Vac	Aut	Br-L	U	4	Tim	Sp	29.2	4	D	162	4500	32x6	D32x6
Garford Series 40	2	3240	Bud D S 6	6	3⅝x5	31.5	Pb	Zen	Vac	Aut	Br-L	U	4	Tim	Wo	34.8	4	D	168	4900	36x6	D36x6
Garford Series 40	2½	3240	Bud D S 6	6	3⅝x5	31.5	Pb	Zen	Vac	Aut	Br-L	U	4	Tim	Wo	34.8	4	D	168	5100	36x6	D36x6
Garford Series 60	2½	4580	Bud B A 6	6	4⅛x5⅛	40.8	Pb	Zen	Vac	Aut	Ful	U	5	Tim	Wo	63.0	4	D	175	7000	36x6	D36x6
Garford Series 60	3	4680	Bud B A 6	6	4⅛x5⅛	40.8	Pb	Zen	Vac	Aut	Ful	U	5	Tim	Wo	63.0	4	D	175	7100	36x6	D36x7
Garford Series 80	3½	5250	Bud B A 6	6	4⅛x5⅛	40.8	Pb	Zen	Vac	Aut	Br-L	C	7	Tim	Wo	98.2	4	D	175	8200	S36x6	S36x12
Garford Series 80	4	5330	Bud B A 6	6	4⅛x5⅛	40.8	Pb	Zen	Vac	Aut	Br-L	C	7	Tim	Wo	98.2	4	D	175	8400	S36x6	S36x14
Garford Series 100	5	5830	Bud B A 6	6	4⅛x5⅛	40.8	Pb	Zen	Vac	Aut	Br-L	C	7	Tim	Wo	95.0	4	D	175	9600	S36x6	S40x14
Gen. Mot. T11-1001	*3800	625	Pontiac	6	3 1/16x3⅞	26.3	Pb	Mar	P	DR	Own	U	3	Pontiac	Sp	14.7	4	4	109⅝	1980	5.00x19B	5.50x19B
Gen. Mot. T15-1501	*5400	695	Pontiac	6	3 1/16x3⅞	26.3	Pb	Mar	P	DR	Own	U	3	Tim 51500	Sp	16.14	4	4	130	2625	5.50x20B	5.50x20B
Gen. Mot. T17-1701	*5500	735	Pontiac	6	3 1/16x3⅞	26.3	Pb	Mar	P	DR	Own	U	3	Tim 51505	Sp	16.04	4	4	130	2650	6.50x20B	6.50x20B
Gen. Mot. T19-2201	*6300	895	Pontiac	6	3 1/16x3⅞	26.3	Pb	Mar	P	DR	Mun	U	1	Tim 5261	Sp	34.45	4	D	130	2850	5.50x20B	32x6
Gen. Mot. T17-1707	*6500	750	Pontiac	6	3 1/16x3⅞	26.3	Pb	Mar	P	DR	Own	U	3	Tim 51505	Sp	16.04	4	4	130	2670	5.50x20B	32x6
Gen. Mot. T25-2501	*6800	1235	Buick	6	3 1/16x4⅝	28.3	Pb	Mar	P	DR	Mun	U	4	Tim 5261	Sp	29.62	4	D	130	3375	6.00x20B	7.50x20B
Gen. Mot. T19-2214	*8500	985	Pontiac	6	3 1/16x3⅞	26.3	Pb	Mar	P	DR	Mun	U	4	Tim 5261	Sp	34.45	4	D	130	2925	30x5	30x5D
Gen. Mot. T25-2509	*8500	1280	Buick	6	3 1/16x4⅝	28.3	Pb	Mar	P	DR	Mun	U	4	Tim 5261	Sp	29.62	4	D	130	3425	30x5	30x5D
Gen. Mot. T30-3206	*9000	1555	Buick	6	3 1/16x4⅝	28.3	Pb	Mar	P	DR	Mun	U	4	Eat 1617	Sp	28.6	4	D	141	4450	6.00x20B	8.25x20B
Gen. Mot. T42-4206	*10600	1735	Buick	6	3 1/16x4⅝	28.3	Pb	Mar	P	DR	Mun	U	4	Eat 1717	Sp	33.38	4	D	141	4575	7.00x20B	9.00x20B
Gen. Mot. T30-3203	*11000	1605	Buick	6	3 1/16x4⅝	28.3	Pb	Mar	P	DR	Mun	U	4	Eat 1617	Sp	28.6	4	D	141	4525	32x6	32x6D
Gen. Mot. T44-4401	*12000	1965	Buick	6	3 1/16x4⅝	28.3	Pb	Mar	P	DR	Mun	U	4	Eat T44DR	2R	40.89	4	D	141	4825	32x6	32x6D
Gen. Mot. T42-4203	*14000	1960	Buick	6	3 1/16x4⅝	28.3	Pb	Mar	P	DR	Mun	U	4	Eat 1717	Sp	33.38	4	D	141	4905	36x6	36x6D
Gen. Mot. T44-4404	*15000	2096	Buick	6	3 1/16x4⅝	28.3	Pb	Mar	P	DR	Mun	U	4	Eat T44DR	2R	40.89	4	D	141	5095	34x7	34x7D
Gen. Mot. T60-6202	*16500	3035	Buick	6	3¾x5	33.7	Pb	Mar	P	DR	Mun	U	4	Tim 65706	Wo	52.53	4	D	154¼	6925	34x7	34x7D
Gen. Mot. T60-6205	*18500	3125	Buick	6	3¾x5	33.7	Pb	Mar	P	DR	Mun	U	4	Tim 65706	Wo	52.53	4	D	154¼	6925	9.00x20B	9.00x20DB
Gen. Mot. T82-8202	*19000	3795	Buick	6	3¾x5	33.7	Pb	Mar	P	DR	Br-L	C	5	Tim 66704	Wo	82.2	4	D	155	7500	9.00x20B	9.00x20DB
Gen. Mot. T82-8207	*22000	4070	Buick	6	3¾x5	33.7	Pb	Mar	P	DR	Br-L	C	5	Tim 66704	Wo	82.2	4	D	155	7850	38x7	38x9D
Gen. Mot. T90-9001	*23000	5885	Buick	6	3¾x5	33.7	Pb	Mar	P	DR	Br-L	C	5	Tim SW-200	Wo	76.04	WR	D	185¼	9400	7.50x20B	7.50x20D
Gen. Mot. T90-9004	*28000	6055	Buick	6	3¾x5	33.7	Pb	Mar	P	DR	Br-L	C	5	Tim SW-200	Wo	76.04	WR	D	185¼	9775	8.25x20B	8.25x20DB
*Gramm B	1½	1495	Lyc 4 SL	6	3¼x4½	25.3	Pb	Zen	Vac	Aut	Cov	U	4	Tim	Sp	34.3	4	Tr	140	3800	30x5	30x5D
*Gramm C	2	1795	Lyc ASA	6	3⅝x4½	31.54	Pb	Zen	P	Aut	Cov	U	4	Tim	Sp	31	4	Tr	160	4820	32x6	32x6D
*Gramm D	2½	2195	Lyc TS	6	3⅞x5	36	Pb	Zen	P	Aut	Cov	U	4	Tim	Sp	33	4	Tr	160	5100	32x6	32x6D
*Gramm E	3	2595	Lyc TS	6	3⅞x5	36	Pb	Zen	P	Aut	Ful	U	4	Tim	Sp	35	4	Tr	160	5300	34x7	34x7D
*Gramm EY	3	3595	Con 20 R	6	4½x4¾	40.80	Pb	Zen	P	Aut	Ful	U	4	Tim	Sp	30	4	D	190	6750	32x6	32x6D
*Gramm O-35	3	3595	Lyc TS	6	3⅞x5	36	Pb	Zen	P	Aut	Ful	C	8	Wis	2R	71.2	D	R	153	7200	36x5S	36x10S
*Gramm T-38	3	3595	Lyc TS	6	3⅞x5	36	Pb	Zen	P	Aut	Ful	U	4	Wis	2R	45	D	R	153	7200	36x5S	36x10S
*Gramm O-45	4	3995	Lyc TS	6	3⅞x5	36	Pb	Zen	P	Aut	Ful	C	8	Wis	2R	75.8	D	R	153	7700	36x5S	36x12S
*Gramm T-48	4	3995	Lyc TS	6	3⅞x5	36	Pb	Zen	P	Aut	Ful	U	4	Wis	2R	47	D	R	153	7700	36x5S	36x12S
*Gramm GY	4	4345	Con 21 R	6	4⅜x4¾	45.9	Pb	Zen	P	Aut	Ful	U	4	Wis	2R	28	4	D	210	7200	34x7	34x7D
*Gramm O-60	5	4745	Lyc TS	6	3⅞x5	36	Pb	Zen	P	Aut	Ful	C	8	Wis	2R	78.4	D	R	153	8800	36x6S	36x14S
*Gramm HY	5	6545	Con 16 H	6	4¾x5¾	54.15	Pb	Zen	P	Aut	Ful	U	4	Wis	2R	25.2	4	D	236	9600	36x8	36x8D
Indiana 64	1	1195	Con	6	3⅜x4⅝	27.3	Pb	Str	Vac	Aut	Br-L	U	3	Col	Sp	21.3	4	Tr	137	3435	30x5	30x5
Indiana 74	1¼	1290	Con	6	3⅜x4⅝	27.3	Pb	Str	Vac	Aut	Br-L	U	4	Col	Sp	25.6	4	Tr	137	3450	32x6	32x6
Indiana 11	1¼	1425	Her	4	4 x5	25.6	Pb	Str	Gra	Aut	Br-L	U	3	Cla	Sp	24.48	R	R	129½	3500	30x5	30x5
Indiana 89	1½	1525	Con	6	3⅜x4⅝	27.3	Pb	Str	Vac	Aut	Br-L	U	4	Col	Sp	25.6	4	Tr	149	3650	32x6	32x6
Indiana 111	1½	1630	Her	4	4 x5	25.6	Pb	Str	Gra	Aut	Br-L	U	3	Cla	Sp	26.4	R	R	129½	3600	30x5	32x6
Indiana 111 XW	2	1850	Her	4	4 x5	25.6	Pb	Str	Vac	Eis	Br-L	U	4	Wis	2R	30.14	R	Tr	120	3740	32x6	32x6D
Indiana 120	2	1990	Con	6	4 x4⅛	38.4	Pb	Str	P	Aut	Br-L	U	4	Tim	Sp	—	4	Tr	156	5200	32x6	32x6D
Indiana 140	2	2495	Con	6	4 x4⅛	38.4	Pb	Str	P	Aut	Br-L	U	4	Wis	2R	—	4V	Tr	156	5500	32x6	32x6D
Indiana 115 A	2½	2740	Her	4	4¼x5	28.9	Pb	Str	Vac	Eis	Br-L	U	4	Cla	Sp	42.99	R	Tr	132	4970	32x6	34x7D
Indiana 615 A	2½	3070	Wis	6	3⅝x5	27.34	Pb	Str	Vac	Eis	Br-L	U	4	Cla	Sp	46.29	R	Tr	136	5160	32x6	32x6D
Indiana 170	2½	3160	Con	6	4⅛x4¾	40.8	Pb	Str	P	Aut	Br-L	U	4	Wis	2R	—	4HV	D	170	6800	32x6	32x6D
Indiana 127 AW	3	3775	Her	4	4¼x5	28.90	Pb	Str	Vac	Eis	Br-L	U	5	Wis	2R	41.72	RV	D	158¼	7000	34x7	34x7D
Indiana 627 AW	3	4075	Wis	6	4 x5	38.40	Pb	Str	Vac	Eis	Br-L	U	5	Wis	2R	41.72	RV	D	156¼	7200	34x7	34x7D
Indiana 195	3	3820	Con	6	4⅛x4¾	40.8	Pb	Str	P	Aut	Br-L	U	4	Wis	2R	—	4HV	D	170	7500	34x7	34x7D
Indiana 190	3	4185	Con	6	4⅛x4¾	40.8	Pb	Str	P	Aut	Br-L	C	7	Tim	Wo	—	RV	D	168½	7625	34x7	34x7D
Indiana 220	3½	4560	Con	6	4⅝x4¾	45.9	Pb	Str	P	Aut	Br-L	U	4	Wis	2R	—	4HV	D	170	8200	36x8	36x8D
Indiana 250	5	5950	Con	6	4⅝x4¾	45.9	Pb	Str	P	Aut	Br-L	U	4	Tim	Wo	—	4HMV	D	182	10000	40x8	40x8D
Indiana 290	7	7250	Con	6	4¾x5¾	54.15	Pb	Str	P	L-N	Br-L	C	7	Tim	Wo	—	4W	D	182	10750	38x7	40x14S
Indiana 640	10	9700	Con	6	4¾x5¾	54.15	Pb	Str	P	L-N	Br-L	C	7	Tim	Wo	—	4RW	D	212	14000	38x7	36x10S
International AW-1	¾	720	Wak X A	4	3½x4½	19.6	Pb	Zen	Vac	DR	Mec	U	3	Eat 517	Sp	17.4	4	2	136	2620	5.25x20	5.25x20
Int. Harvester Sp. Del.	¾	720	Wak X A	4	3½x4½	19.6	Pb	Zen	Vac	DR	Mec	U	3	Eat 502 R	Sp	15.1	4	2	124	2200	30x5.25	30x5.25
Int. Harv. 6 Spd. Spec.	1	820	Wak X A	4	3½x4½	19.6	Pb	Zen	Vac	DR	Mec	U	3	Eat 1124	Sp	52.6	4	2	124	2430	30x5	30x5
Int. Harvester S-24	1¼	1160	Lyc C T	4	3¾x5	22.5	Pw	Zen	Vac	DR	Own	U	3	Eat 1002	Sp	21.3	4	2	130	3200	30x5	30x5
Int. Harvester S-26	1¼	1310	Lyc 4 S L	6	3¼x4½	25.3	Pb	Zen	Vac	DR	Own	U	3	Eat 1002	Sp	21.3	4	2	130	3250	30x5	30x5
Int. Harvester SF-34	1½	1450	Lyc C T	4	3¾x5	22.5	Pw	Zen	Vac	DR	Own	U	3	Eat 1502	Sp	22.6	4	2	140	3520	30x5	32x6
International AL-3	1½	1450	Lyc SLH	6	3¼x4½	25.3	Pb	Zen	Vac	DR	W-G	U	4	Eat 1518	Sp	42.9	4	2	138	4300	6.00x20	6.00x20D
Int. Harvester SF-36	1½	1600	Lyc 4 S L	6	3¼x4½	25.3	Pb	Zen	Vac	DR	Own	U	3	Eat 1502	Sp	22.6	4	2	140	3570	30x5	32x6
Int. Harvester SD-44	2	1590	Lyc C T	4	3¾x5	22.5	Pw	Zen	Vac	AB	Own	U	4	Eat 2002	Sp	40.6	4	2	117	3700	30x5	32x6
Int. Harvester SD-46	2	1740	Lyc 4 S L	6	3¼x4½	25.3	Pb	Zen	Vac	AB	Own	U	4	Eat 2002	Sp	40.6	4	2	117	3750	30x5	32x6
Int. Harvester SF-46	2	1950	Lyc 4 S L	6	3¼x4½	25.3	Pb	Zen	Vac	DR	Own	U	4	Eat 2002	Sp	40.6	4	2	140	4000	32x6	32x6D
Int. Harvester A-4	2	1985	Own-FBB	6	3⅝x4½	31.5	Pb	Zen	Vac	DR	Own	U	5	Eat 1712	Sp	47.8	4	2	145	5070	32x6	32x6D
Int. Harvester HS-54	2½	3850	Hall-S 151	4	4¼x5½	28.9	Pb	Zen	Vac	RB	Own	U	5	Eat 54	2R	60.5	4	4	148	8000	36x5S	36x8S
Int. Harvester HS-54-C	2½	3850	Hall-S 151	4	4¼x5½	28.9	Pb	Zen	Vac	RB	Own	U	5	Own A M 428	Ch	63.8	4	4	148	8665	36x5S	36x10S
Int. Harvester W-1	2½	3850	Hall-S 151	4	4¼x5½	28.9	Pb	Zen	Vac	RB	Own	U	5	Eat 58	2R	60.5	4	2	148	8300	36x5S	36x8S
Int. Harvester A-5	3	2550	Own-FBB	6	3⅝x4½	31.5	Pb	Zen	Vac	DR	Own	U	5	Eat 2112	Sp	52.0	4	2	156	5606	34x7	34x7D
Int. Harvester HS-74	3½	4850	Hall-S 152	4	4¾x5½	36.1	Pb	Zen	Vac	RB	Own	U	5	Eat 74	2R	70.5	4	4	160	10700	36x5S	40x12S
Int. Harvester HS-74-C	3½	4850	Hall-S 152	4	4¾x5½	36.1	Pb	Zen	Vac	RB	Own	U	5	Own A M 427	Ch	79.1	4	4	160	11000	36x6S	40x12S
Int. Harvester W-2	3½	4850	Hall-S 152	4	4¾x5½	36.1	Pb	Zen	Vac	RB	Own	U	5	Eat 78	2R	70.5	4	2	160	10125	36x6S	40x12S
Int. Harv's'r HS-104-C	5	5500	Hall-S 152	4	4¾x5½	36.1	Pb	Zen	Vac	RB	Own	U	5	Own A M 427	Ch	90.5	4	4	160	11095	36x6S	40x14S
La France-Repub. A-1	*6000	990	Lyc	6	2⅞x4¾	19.8	Pb	Zen	Vac	Aut	Ful	U	4	Tim	Sp	36.1	4	Tr	132	3000	5.50x20	32x6
La France-Repub. C-1	*7000	1295	Lyc	6	3¼x4½	25.4	Pb	Zen	Vac	Aut	Br-L	U	4	Tim	Sp	29.1	4	Tr	144	3300	6.00x20	32x6
La France-Repub. D-1	*9000	1595	Lyc	6	3¼x4½	25.4	Pb	Zen	Vac	Aut	Ful	U	4	Tim	Sp	37.9	4	Tr	144	3725	30x5	30x5D
La France-Repub. F-2	*13000	2395	Lyc	6	3⅝x5	31.5	Pb	Zen	Vac	Aut	Ful	U	4	Tim	Sp	40.1	4	D	174	5870	32x6	32x6D
La France-Repub. H-1	*15000	2985	Lyc	6	3⅞x5	36.0	Pb	Zen	Vac	Aut	Ful	U	4	Eat	Sp	36.0	4	D	163	5850	34x7	34x7D
La France-Repub. L-1	*18000	3595	Lyc	6	3⅞x5	36.0	Pb	Zen	Vac	Aut	Ful	U	4	Eat	2R	48.0	4	D	180	6900	36x8	36x8D
La France-Repub. M-1	*20000	3800	Wak	6	4 x4¾	38.4	Pb	Zen	Vac	Aut	Ful	U	5	Eat	2R	62.3	R	D	171	6900	36x8	36x8D
Mack BL	1	2500	Own	6	3¼x5	25.39	Pw	Str	Vac	NE	Own	U	4	Own	Sp	Opt	4	D	148	——	B6.00x20	DB6.00x20
††Mack BG	1½	3000	Own	6	3⅝x5	31.57	Pw	Str	Vac	NE	Own	U	4	Own	Sp	Opt	4	D	138-156	——	32x6	D32x6
Mack AB	2½-3	3950	Own	4	4¼x5	28.9	Pb	Str	Gra	RB	Own	U	4	Own	2R	Opt	R	D	2-Opt	——	36x4S	36x8S
††Mack AB	2½-3	3500	Own	4	4¼x5	28.9	Pb	Str	Gra	RB	Own	U	4	Own	Ch	Opt	R	D	2-Opt	——	36x4S	36x8S
Mack AB	2½-3	4750	Own	6	3⅝x5	31.57	Pw	Str	Vac	NE	Own	U	4	Own	2R	Opt	R	D	2-Opt	——	34x7	D34x7
††Mack AB	2½-3	4300	Own	6	3⅝x5	31.57	Pw	Str	Vac	NE	Own	U	4	Own	Ch	Opt	R	D	2-Opt	——	34x7	D34x7
††Mack BC	3½-4	4250	Own	4	4¼x5	28.9	Pb	Str	Gra	RB	Own	U	4	Own	2R	Opt	4	D	2-Opt	——	36x5S	36x5DS
††Mack BC	3½-4	5250	Own	6	4 x5½	38.4	Pb	Str	Vac	NE	Own	U	4	Own	2R	Opt	4	D	2-Opt	——	34x7	D36x8
††Mack BJ	3½-5	6150	Own	6	4½x5½	48.6	Pb	Str	Vac	NE	Own	C	4	Own	2R	Opt	4	D	3-Opt	——	36x8	36x8D
††Mack AK	3½-5	5150	Own	4	5 x6	40.0	Pb	Str	Gra	RB	Own	J	4	Own	Ch	Opt	4	J	3-Opt	——	36x5S	36x5DS
††Mack AK	3½-5	5250	Own	4	5 x6	40.0	Pb	Str	Gra	RB	Own	C	4	Own	2R	Opt	4	D	3-Opt	——	36x5S	36x5DS
††Mack AC	3½-5	4950	Own	4	5 x6	40.0	Pb	Str	Gra	RB	Own	J	4	Own	Ch	Opt	J	R	3-Opt	——	36x5S	40x10S
††Mack AC	5½-7	5500	Own	4	5 x6	40.0	Pb	Str	Gra	RB	Own	J	4	Own	Ch	Opt	J	R	3-Opt	——	36x6S	40x12S
††Mack AC	7½	6000	Own	4	5 x6	40.0	Pb	Str	Gra	RB	Own	J	4	Own	Ch	Opt	J	R	3-Opt	——	36x7S	40x14S
††Mack AP	7½	9500	Own	6	5 x6	60.0	Pb	Str	Gra	NE	Own	J	4	Own	Ch	Opt	R	J	191	——	36x7S	40x8DS
Mack AC 6-wheel	10	7500	Own	4	5 x6	40.0	Pb	Str	Gra	RB	Own	J	4	Own	Ch	Opt	4R	J	3-Opt	——	36x7S	40x12S
Mack AP 6-wheel	10	12000	Own	6	5 x6	60.0	Pb	Str	Gra	NE	Own	J	4	Own	Ch	Opt	4R	J	3-Opt	——	36x7	40x12S
Paige	¾	860	Own	6	3¼x4½	25.35	Pb	DL	P	DR	W-G	U	3	Sal	Sp	17.36	4	Tr	115	2465	B5.50x19	B5.50x19
Relay Series 15	¾	1370	Con 17 E	6	3⅜x4	27.3	Pb	Str	Vac	Aut	W-G	U	4	Own	R	38.4	4	D	131	3750	30x5P	30x5P
Relay Series 15	1	1400	Con 17 E	6	3⅜x4	27.3	Pb	Str	Vac	Aut	W-G	U	4	Own	R	38.4	4	D	139	3800	30x5P	30x5P

Major Specifications and Mechanical Details of 1930 Commercial Cars Built in the United States

Make and Model	Capacity—Tons	Chassis Price	Engine	No. of Cyl.	Bore and Stroke	Tax H. P.	Oil System	Carburetor	Fuel Feed	Ignit. System	Gear Set	Location	No. Spds. For.	Rear Axle	Final Drive	Reduction in Low	Brakes, Foot	Brakes, Hand	Standard Wheel Base	Chassis Weight	Standard Tire Sizes Front	Rear
Relay Series 40	1½	2990	Bud D S 6	6	3⅝x5	31.5	Pb	Zen	Vac	Aut	Br-L	U	4	Own	R	34.5	4	D	168	5300	34x5	D34x5
Relay Series S 11	2	2030	Bud H S 6	6	3⅜x4½	27.3	Pb	Zen	Vac	Aut	Br-L	U	4	Own	R	30.0	4	D	162	4700	32x6	D32x6
Relay Series 50	2	3860	Bud D W 6	6	3¾x5	33.7	Pb	Zen	Vac	Aut	Br-L	U	5	Own	R	58.5	4	D	161	6800	36x6	D36x6
Relay Series 60	2½	4555	Bud B A 6	6	4 x5⅛	40.8	Pb	Zen	Vac	Aut	Ful	U	5	Own	R	63.7	4	D	175	7350	36x6	D36x6
Relay Series 80	3	5330	Bud B A 6	6	4⅛x5⅛	40.8	Pb	Zen	Vac	Aut	Br-L	U	8	Own	R	84.18	4	D	175	8400	36x6	S40x10
Relay Series 80	4	5380	Bud B A	6	4⅛x5⅛	40.8	Pb	Zen	Vac	Aut	Cov	C	8	Own	R	84.18	4	D	175	8800	38x7	S40x14
Relay Series 100	5	6615	Con 21 R	6	4⅜x4¾	45.9	Pb	Str	Vac	Aut	Ful	U	5	Own	R	63.7	4	D	230	10000	9.00x24	D9.75x24
Reo D F 129	½	1095	Own	6	3¾x5	27.3	Pb	Sch	P	DR	Own	U	3	Own	Sp	17.1	4	Tr	129	—	6.00x20	32x6
Reo 15 Junior	½	785	Con 16 E	6	3⅜x4	27.3	Pb	Sch	P	DR	W-G	U	3	Sal	Sp	14.63	4	Tr	115	2290	6.00x18	6.00x18
Reo D F	1	1095	Own C B	6	3¾x5	27.3	Pb	Sch	P	DR	Own	U	3	Own	Sp	17.1	4	Tr	135	3200	6.00x20	32x6
Reo F A	1½	1295	Own	6	3⅜x5	27.3	Pb	Sch	Vac	DR	Own	U	4	Own	Sp	22.96	4	Tr	135	3525	6.50x20	32x6
Reo F E	1½	1395	Own	6	3⅜x5	27.3	Pb	Sch	Vac	DR	Own	U	4	Own	Sp	22.96	4	Tr	152	3700	6.50x20	32x6
Reo F F	1½	1395	Own	6	3⅜x5	27.3	Pb	Sch	Vac	DR	Own	U	4	Own	Sp	22.96	4	Tr	156	3750	6.50x20	32x6
Reo F H	2	1595	Own	6	3⅜x5	27.3	Pb	Sch	Vac	DR	Own	U	4	Own	Sp	37.6	4	Tr	142	4165	32x6	32x6D
Reo F C	2	1645	Own	6	3⅜x5	27.3	Pb	Sch	Vac	DR	Own	U	4	Own	Sp	37.62	4	Tr	152	4025	32x6	32x6D
Reo F D	2	1745	Own	6	3⅜x5	27.3	Pb	Sch	Vac	DR	Own	U	4	Own	Sp	37.62	4	Tr	168	4075	32x6	32x6D
Reo G A	3	3035	Own	6	3⅜x5	27.3	Pb	Sch	Vac	DR	Own	U	4	Own	Sp	41.05	4	Tr	163	4625	32x6	32x6D
Reo G C	3	2140	Own	6	3⅜x5	27.3	Pb	Sch	Vac	DR	Own	U	4	Own	Sp	41.05	4	Tr	179	4850	32x6	32x6D
Reo G D	3	1935	Own	6	3⅜x5	27.3	Pb	Sch	Vac	DR	Own	U	4	Own	Sp	46.2	4	Tr	144	4570	32x6	32x6D
Reo G C S	3	2375	Own	6	3⅜x5	27.3	Pb	Sch	Vac	DR	Own	U	4	Own	Sp	41.05	4	Tr	210	5320	32x6	32x6D
Rugby T	½	655	Con	6	3¼x4	25.4	Pb	Str	P	Aut	Own	U	3	Own	Sp	15.6	4	4	—	2160	29x5	29x5
Rugby 6-15	1	865	Con	6	3¼x4	25.4	Pb	Str	P	Aut	Br-L	U	4	Sal	Sp	34.49	4	Tr	135	2900	20x5.50	32x6
Rugby 615	1½	930	Con	6	3¼x4	25.4	Pb	Str	P	Aut	Br-L	U	4	Sal	Sp	34.49	4	Tr	135	3000	5.50x20	30x5D
Selden 7 C	1	1098	Con	6	2⅜x4¾	19.84	Pb	Zen	Vac	Aut	Br-L	U	3	Tim	Sp	—	4	D	124	3600	30x5	30x5
Selden 17 C	1½	1500	Con	6	3¾x4	27.3	Pb	Zen	Vac	Aut	Br-L	U	4	Tim	Sp	—	4	D	142	3900	32x6	32x6
Selden 317 C	1½	1610	Con	6	3⅜x4⅝	27.34	Pb	Str	Vac	Aut	Br-L	U	4	Tim	Sp	—	4	D	142	3900	32x6	32x6
Selden 37 C	2	1935	Con	6	3⅜x4⅝	27.34	Pb	Str	Vac	Aut	Br-L	U	4	Tim	Sp	—	4	D	151	4800	32x6	32x6D
Selden 39 C	2½	2920	Con	6	4 x4½	38.4	Pb	Str	Vac	Aut	Br-L	U	4	Tim	Sp	—	4	D	164	5800	32x6	32x6D
Selden 47 C B	3½	3785	Con	6	4 x4½	38.4	Pb	Str	Vac	Aut	Br-L	U	4	Tim	Sp	—	4	D	171	7200	34x7	34x7D
Selden 47 C D	4	4435	Con	6	4 x4½	38.4	Pb	Str	Vac	Aut	Br-L	U	5	Wis	2R	—	4	D	171	7600	36x8	36x8D
Selden 67 C	5	4975	Con	6	4⅜x4¾	45.94	Pb	Str	Vac	Aut	Br-L	C	7	Wis	2R	—	4	D	171	8700	36x8	36x8D
Selden 77	7	7365	Con	6	4¾x5¾	54.15	Pb	Str	Vac	Aut	Br-L	C	7	Wis	2R	—	4	D	178	12000	36x7	40x7D
Service Series S 11	1	1600	Bud H S 6	6	3⅜x4½	27.3	Pb	Zen	Vac	Aut	Br-L	U	4	Col	Sp	25.5	4	D	142	3900	30x5	30x5
Service Series S 11	1½	1900	Bud H S 6	6	3⅜x4½	27.3	Pb	Zen	Vac	Aut	Br-L	U	4	Tim	Sp	29.2	4	D	162	4300	30x5	D30x5
Service Series 40	1½	2990	Bud D S 6	6	3⅝x5	31.5	Pb	Zen	Vac	Aut	Br-L	U	4	Tim	Wo	34.8	4	D	168	4700	34x5	D34x5
Service Series S 11	2	2030	Bud H S 6	6	3⅜x4½	27.3	Pb	Zen	Vac	Aut	Br-L	U	4	Tim	Sp	29.2	4	D	162	4500	32x6	D32x6
Service Series 40	2	3240	Bud D S 6	6	3⅝x5	31.5	Pb	Zen	Vac	Aut	Br-L	U	4	Tim	Wo	34.8	4	D	168	4900	36x6	D36x6
Service Series 40	2½	3240	Bud D S 6	6	3⅝x5	31.5	Pb	Zen	Vac	Aut	Br-L	U	4	Tim	Wo	34.8	4	D	168	5100	36x6	D36x6
Service Series 60	2½	4580	Bud B A 6	6	4⅛x5⅛	40.8	Pb	Zen	Vac	Aut	Ful	U	5	Tim	Wo	63.0	4	D	175	7000	36x6	36x6
Service Series 60	3	4680	Bud B A 6	6	4⅛x5⅛	40.8	Pb	Zen	Vac	Aut	Ful	U	5	Tim	Wo	63.0	4	D	175	7100	36x6	D36x7
Service Series 80	3½	5250	Bud B A 6	6	4⅛x5⅛	40.8	Pb	Zen	Vac	Aut	Br-L	C	7	Tim	Wo	98.2	4	D	175	8200	S36x6	S36x12
Service Series 80	4	5330	Bud B A 6	6	4⅛x5⅛	40.8	Pb	Zen	Vac	Aut	Br-L	C	7	Tim	Wo	98.2	4	D	175	8400	S36x6	S36x14
Service Series 100	5	5830	Bud B A 6	6	4⅛x5⅛	40.8	Pb	Zen	Vac	Aut	Br-L	C	7	Tim	Wo	95.0	4	D	175	9600	S36x6	S40x14
Stewart 30	1	695	Lyc AFE	4	3¾x4½	22.5	Pb	Str	Vac	DR	W-G	U	4	Sal	Sp	35.1	4	D	130	2905	6.50x20	6.50x20
Stewart 30 X	1	795	Lyc WRG	6	2⅞x4¾	19.8	Pb	Str	Vac	DR	W-G	U	4	Sal	Sp	35.1	4	D	130	2965	6.50x20	6.50x20
Stewart 40	1½	895	Lyc AFE	4	3¾x4½	22.5	P	Str	Vac	DR	W-G	U	4	Cla	Sp	35.1	4	D	130	3215	6.50x20	6.50x20D
Stewart 34 X	1½	1195	Lyc 4 SL	6	3¼x4½	25.3	Pb	Str	Vac	DR	W-G	U	4	Cla	Sp	35.1	4	D	145	3526	6.50x20	6.50x20
Stewart 28 X	1¾	1495	Lyc 4 SL	6	3¼x4½	25.3	Pb	Str	Vac	DR	Ful	U	4	Cla	Sp	44.1	4	D	136	3840	6.50x20	6.50x20
Stewart 29 XS	2	1695	Lyc ASA	6	3⅝x4½	25.3	Pb	Str	P	DR	Ful	U	4	Cla	Sp	44.1	4	D	145	4188	32x6	32x6D
Stewart 26 XW	2	2290	Lyc TF	6	3⅝x5	31.5	Pw	Str	Vac	DR	Ful	U	4	Tim	Wo	48.1	4	D	165	5095	32x6	32x6D
Stewart 18 X	2½	2690	Lyc TF	6	3⅝x5	31.5	Pw	Str	Vac	DR	Ful	U	4	Tim	Wo	48.1	4	D	165	5788	32x6	32x6D
Stewart 32 X	2½	1990	Lyc ASA	6	3⅝x4½	31.54	Pw	Str	Vac	DR	Ful	U	4	Cla	Sp	46.1	4	D	165	5100	32x6	32x6D
Stewart 33 X	3	3290	Lyc TS	6	3⅞x5	36.2	Pw	Str	Vac	DR	Ful	U	4	Tim	Wo	105.1	4	D	165	6450	34x7	34x7D
Stewart 19 X	3½	3690	Lyc TS	6	3⅞x5	36.2	Pw	Str	Vac	DR	Ful	C	12	Tim	Wo	105.1	4	D	165	6990	36x5	36x10
Stewart 31 X	5	4990	Wak 6 RSL	6	4⅜x5⅛	45.9	Pw	Str	Vac	DR	Ful	C	8	Tim	Wo	82.1	4	D	165	8400	36x6S	36x6SD
Stewart 27 X	6-7	5700	Wak 6 RSL	6	4⅜x5⅛	45.99	Pw	Str	Vac	DR	Ful	U	8	Tim	Wo	93.81	4	D	165	9927	36x7	40x7D
Studebaker GN-P	¾	845	Own	6	3⅜x4⅛	27.3	Pb	Str	P	DR	Own	U	3	Own	Sp	15.15	4	‡4	115	2465	6.00x19	6.00x19
Studebaker GN-S	1	1045	Own	6	3⅜x4⅛	27.3	Pb	Str	P	DR	Own	U	3	Own	Sp	13.8	4	D	130	2990	6.00x20	30x5
Studebaker GK-N	1	1095	Own	6	3⅜x4⅝	27.3	Pb	Str	P	DR	Own	U	3	Own	Sp	13.8	4	D	146	3000	30x5	30x5
Studebaker S-20	1½	695	Own	6	3¼x4⅛	25.4	Pb	Str	P	DR	W-G	U	4	Tim	Sp	36.2	4	4	130	3000	6x20	32x6
Studebaker S-30	1½	775	Own	6	3¼x4⅛	25.4	Pb	Str	P	DR	W-G	U	4	Tim	Sp	36.2	4	4	160		6x20	32x6
Studebaker S-50	2	895	Own	6	3¼x4⅛	25.4	Pb	Str	P	DR	W-G	U	4	Tim	Sp	37.4	4	4	148		6.50x20	6.50x20D
Studebaker S-60	2	945	Own	6	3¼x4⅛	25.4	Pb	Str	P	DR	W-G	U	4	Tim	Sp	37.4	4	4	160		6.50x20	6.50x20D
Studebaker GN-N	*4000	1245	Own	6	3⅜x4⅛	27.3	Pb	Str	P	DR	Cla	U	4	Cla	Sp	33.5	4	D	146	3265	30x5	32x6
Studebaker 77	*12500	2895	Own	8	3½x4⅜	39.2	Pb	Str	P	DR	Ful	U	4	Eat	Sp	24.6	4V	D	158	5030	7.00x20	7.00x20D
Studebaker 88	*12500	3295	Own	8	3½x4⅜	39.2	Pb	Str	P	DR	Ful	U	4	Eat	Sp	24.6	4V	D	184	5200	7.50x20	7.50x20D
Studebaker 99	*14000	3795	Own	8	3½x4⅜	39.2	Pb	Str	P	DR	Ful	U	4	Eat	Sp	24.6	4V	D	184	5680	7.50x20	7.50x20D
Whippet 96 A	½	360	Own 96 A	4	3⅛x4¾	15.6	Pb	Til	Vac	Aut	Own	U	3	Own	Sp	14.74	4	R	103¼	1691	4.75x19	4.75x19
White 15 B		1545	Own GKA	4	3¾x5⅛	22.5	CS	Zen	Vac	L-N	Own	C	4	Own	Sp	18.6	R	R	133½	3402	30x5	30x5
White 60		1850	Own 2 A	6	3½x4½	29.4	Pw	Zen	Vac	DR	Own	U	3	Own	Sp	17.9	4	D	138	3739	30x5	30x5
White 57		2725	Own GRC	4	4 x5¾	25.6	Pw	Zen	Vac	L-N	Own	U	4	Own	Sp	19.3	R	R	146	3935	32x6	32x6
White 20 A		2125	Own GKA	4	3¾x5⅛	22.5	CS	Zen	Vac	L-N	Own	C	4	Own	2R	32.1	R	R	145½	4572	34x5	34x5D
White 61		2450	Own 4 A	6	3¾x4½	33.75	Pw	Zen	Vac	DR	Own	U	4	Own	Sp	23.4	4	D	148	4789	30x5	30x5D
White 56		3125	Own GRC	4	4 x5¾	25.6	Pw	Zen	Vac	Mag	Own	U	4	Own	Sp	26.2	R	D	165	5276	36x4S	36x7S
White 51 A		3750	Own GRB	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	4	Own	Sp	35.6	R	D	170	6438	36x5S	36x9S
White 58		4400	Own GRB	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	4	Own	IG	49.7	D	R	170	6438	36x5S	36x8S
White 55		4650	Own GRB	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	4	Own	IG	66.1	D	R	174	8737	36x5S	40x5SD
White 52 T		4700	Own GRB	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	4	Own	IG	76.5	D	R	129½	8461	36x5S	40x5SD
White 52		5100	Own GRB	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	5	Own	IG	92.3	D	R	174	9409	36x6S	40x12S
White 59 A		6000	Own 3 A	6	4 x5¼	38.4	Pw	Zen	P	DR	Own	U	4	Own	Sp	66.5	D	R	155	9775	40x8	40x14S
White 63		5000	Own 3 A	6	4 x5¼	38.4	Pw	Zen	P	DR	Own	U	4	Own	Sp	41.4	4	D	168	8350	34x7P	34x7DP
White 64		6300	Own 1 A	6	4⅜x5¾	45.94	Pw	Zen	P	LN	Own	U	4	Own	2R	46.8	4	D	180	9154	36x8P	36x8DP
Willys Six 98 B	½	525	Own 98 B	6	3¼x3⅞	25.35	Pb	Til	Vac	Aut	Own	U	3	Own	Sp	14.28	4	B	110	1903	5.00x19	5.00x19
Willys Six C-101	1½	695	Own 98 B	6	3¼x3⅞	25.35	Pb	Til	Vac	Aut	Cov	U	4	Cla	Sp	36.12	4	B	131	2675	5.50x20	30x5
Willys-Knight T-103	1½	825	Own KGT	6	2⅞x4⅜	20.7	Pb	Til	Vac	Aut	Cov	U	4	Cla	Sp	42.33	4	B	131	2808	5.50x20	30x5

GENERAL NOTATIONS

***†REFERENCE MARKS** apply to individual lines only and explanations are given under the subdivision for each company in the **"SPECIAL NOTATIONS."**

CAPACITIES given in this table are in tons or fractions of tons. *Shows maximum allowable gross weight in pounds.

WHEEL BASES given are standard, but optional wheel bases are available in many cases.

ENGINE—Bud, Buda; Con., Continental; Her, Hercules; Kgt, Knight; Lyc, Lycoming; Wak, Waukesha; Wis, Wisconsin Hall, American Car & Foundry.

LUBRICATION—Pb, pressure lubrication to main and connecting rod bearings; Pw, full pressure lubrication to all main, connecting rod and camshaft bearings, including wrist-pins; CS, circulating splash; Sp, Splash.

CARBURETOR—Car, Carter; Mar, Marvel; Sch, Wheeler-Schebler; Str, Stromberg; Det, Detroit Lubricator; Til, Tillotson; Zen, Zenith-Detroit.

FUEL FEED—Gra, Gravity; Vac, Vacuum tank; P, Fuel pump.

IGNITION—AB, American-Bosch; Aut, Electric Auto-Lite; Eis, Eisemann; L-N, Leece-Neville; N-E, North East; RB, Robert Bosch; D R, Delco-Remy; Mag, Magneto.

TRANSMISSION—Br, L, Brown-Lipe; Cov, Covert; Ful, Fuller; Mec, Mechanics Machine; Mun, Muncie; W-G, Warner Gear; Cotta, Cotta Gear Co.

LOCATION—C, Center, amid; U, in unit with engine; J, on jackshaft.

REAR AXLE—Cla, Clark Equipment; Col, Columbia; Eat, Eaton; Sal, Salisbury; Tim, Timken, Wis, Wisconsin.

FINAL DRIVE—IG, Internal gear; St, Straight bevel; Sp, Spiral bevel; Wo, Worm; 2R, Double reduction; Ch, Chain; R, Relay drive.

BRAKES—J, Jack shaft; R, Rear wheels; D, Drive shaft; 4, four-wheel; Tr, Transmission; V, Vacuum booster; W, Westinghouse air brake. B, Both front and rear wheels.

TIRES—B, Balloon; D, Dual; S, Solid; P, Pneumatic.

SPECIAL NOTATIONS

AMERICAN-LA FRANCE

*Chief model also available as 2½-ton model, 34x7 tire, dual rear, weight 6,400. Price $3,900.

Chieftain mude also available as Dump Truck, 160-inch wheel base.

Balloon tires optional on Chief, Chieftain and Big Chief models.

AUSTIN

*Price includes body.

AUTOCAR

*Engines in these models are located under the driver's seat.

DAY-ELDER

Models CF and HF also available in 136-inch wheel base.

Model JF also available in the following wheel bases: 165, 180 and 204 inches.

Model KF also available in 202-inch wheel base and tractor 149.

DURANT LINE

*Price include» panel body.

F. W. D.

*Indicates six-wheel model. Special power take-off transmission, which provides 3 power take offs which may be operated in any transmission speed, optional on all models.

*Foot brake on X6 is a lockheed type operating on all six wheels.

FEDERAL

*Six wheelers.

GRAMM

*Models B, C, D and E are furnished in three wheel base lengths—others on request.

*Models GY and GYB also available in 190-inch wheel base.

*Models HY and HYB also available in 210-inch wheel base.

Tire sizes and electrical equipment optional, depending upon type of service—coach or van.

*Model O Series. Large engine, pneumatic tires, special wheel bases optional at extra cost.

*Model T Series. Large engine, pneumatic tires, special wheel bases and 8 speed transmission optional at extra cost.

GENERAL MOTORS TRUCK LINE

*Capacity indicated for each chassis is the recommended gross weight without exceeding rated capacity of tires. The tire size does not affect the straight rating for which chassis is guaranteed and each model is designed to operate satisfactorily under average conditions with loads giving a total gross weight (chassis, body, equipment and payload) equal to straight rating given below. The additional standard wheel base lengths, the number of additional tire types (tire combinations—each type carrying a recommended gross weight) and the ton range on a nominal payload basis for each model is given below

Model	Straight Rating	Additional Wh. Bases, ins.	Addit'l Tire Types	Pay'd Range
T-11	3800	None	None	½
T-15	5400	141	2	¾
T-17	6500	141	6	¾-1¼
T-19	8500	141, 152	16	1-2
T-25	8500	141, 152	11	1-1¾
T-30	11000	152, 164	12	1½-2½
T-42	14000	152, 164, 181	10	2-3½
T-44	15000	152, 164, 181	10	2-4
T-60	18500	166¾, 184½, 200½	16	2½-4½
T-32	22000	167½, 185¼, 201	10	3-6
T-90	28000	201, 220	5	5-7½

Optional rear axle ratios are available for all models.

MACK LINE

Other wheel bases furnished on all truck models.

On 6-wheel jobs, 4 rear wheels driven by chains, foot brake on 4 rear wheels.

HYP.—Hypoid drive, single reduction.

††Made also in tractor models.

REO LINE

Model F A also available in 129-inch wheel base.

RUGBY

F—Chassis weight includes body.

STEWART LINE

Model 30 and 30X can also be supplied in 120 and 140-inch wheel base.

Model 40 can also be supplied in 140 and 160-inch wheel base.

*Model 34X can be supplied in 145, 160 and 175-inch wheel base.

Model 28X can be supplied in 145, 160 and 176-inch wheel base.

Model 29XS can be supplied in 160 and 176-inch wheel base.

*Model 26XW can be supplied in 148, 176 and 190-inch wheel base.

*Models 18X, 32X and 33X can be supplied in 148, 190 and 220-inch wheel base.

*Models 19X, 31X and 27X can be supplied in 148, 172, 190, 220 and 235-inch wheel base.

As optional equipment models 18X, 19X, 33X, 31X and 27X can be supplied with Timken dual reduction rear axle.

STUDEBAKER LINE

*Capacity Model GN-N is 4,000 lbs. for body, cab, driver and payload.

Maximum gross load, chassis, body and payload for Models 77 and 88 is 13,500 lbs. and for Model 99 is 14,000 lbs.

‡Hand brake same as foot brake, standard. Hand brake on drive shaft, special equipment.

Production--Engineering--Factory

Dupont Engineer Discusses Life of Body Finish

G. W. Sherin of E. I. du Pont de Nemours & Co., has issued the following statement on the preservation of automobile body finish:

"Deterioration of the finish is generally caused by two things. First, a thin film of dirt accumulates on the finish and becomes baked there by the sun and engine heat. Second, the finish itself becomes weathered through frequent exposure to the sun, rain, heat and cold.

"The element most destructive to automobile finishes is the ultra-violet ray of the sun. This is the ray which is chiefly responsible for burning or tanning the skin of a human being.

"Lacquer is much more durable than the old paint and varnish finishes used on automobiles. Lacquer, however, does not last forever. It slowly wears out through a microscopic erosion of the surface, releasing tiny pigment particles which were originally put into the finish to color it. The ultra-violet rays of the sun cause this slow disintegration.

"When polish is rubbed on a car finish, and the cloth becomes stained with the color of the car, there are simply transferred to the cloth small particles of chalked pigment which are no longer a part of the finish and which should be removed anyway. As long as these particles, and the hardened dirt film, cover the finish, there will be no lustre. When, however, the "traffic film" and chalked pigment are removed, the original color and lustre of the finish is restored and it is just as bright and shiny as when the car was new.

"If the finish is very old, or has been very thin at the start, it may have weathered right through to the under-coat. Should this happen, it will be apparent when the car is polished, because the undercoat is usually of a different and darker color. In this case, the car should be refinished, at least at the spots where the undercoat is showing.

"There are two ways of prolonging the life of the finish. First, by protecting it from the sun as much as possible. Second, by having it waxed.

"Ordinary window glass excludes the ultra-violet rays of the sun. One can sit behind a closed window all day long and not get sunburned, even though the sun is shining directly on the person. Polishing wax, like window glass, excludes the ultra-violet rays of the sun. If, therefore, there is applied a thin coating of wax over the finish, it will filter out the ultra-violet rays and retard weathering until the wax wears off.

"It is best to apply a polishing wax to a car as soon as it is purchased. If, however, this is neglected, a polishing wax can always be applied as long as there is a finish on the car. But the finish must be thoroughly cleaned before a wax can be applied satisfactorily. It is not enough to have the car washed. It must be polished, also, to remove chalked pigment and traffic film. If the car has not been polished for some time, it is best to make two or three applications of the polish before using the wax, making sure to remove every bit of chalked pigment and dirt film.

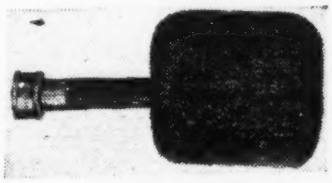
"Then the polishing wax should be applied. It should be used sparingly and rubbed vigorously to develop a good shine. It will probably not produce any higher lustre than was developed with the polish, but it will give a lustre which will last for months, and it will protect the finish as well.

"In the summer time, there is a great deal more ultra-violet in the sunlight than in the winter time, so it is especially important to have the car polished and waxed regularly in summer. Waxing is important also in the southern states, where there is a lot of sunshine throughout the year, and where finishes become weathered a great deal more rapidly than they do in the north.

"Water absorption is also injurious to automotive finishes and can be prevented by waxing the car. Water flows out in a sheet on a weathered finish, indicating moisture absorption, but it forms in droplets on a waxed surface, showing that the wax prevents the water penetrating into the pores of the finish."

NU-WAY RUBBER SPONGE PLACED ON MARKET

The United States Rubber Specialty Company, Trenton, N. J., is now marketing two new rubber automobile sponges under the trade name Nu-Way.



Nu-Way rubber automobile sponge with hose attachment

The individual model is designed to be attached to a water hose and will permit the flow of water through it while it is being used.

Nu-Way rubber automobile sponge with twelve-inch enameled handle

The utility model is fitted to an enameled handle twelve inches long.

Both models are made of sponge rubber 4 inches by 3½ inches by 2¼ inches, washable in ordinary soap and water.

New Wilson 100-Ampere Arc Welder Designed For Garage Use

The Wilson Welder and Metals Company, Inc., Hoboken, has introduced a new 100-ampere arc welder for garage use.

To meet the need for small welding units for garages, a small, compact, lightweight type, 100 amperes, Wilson Model S welder has been put on the market. In addition to being easy to use, even in cramped quarters, this type 100-ampere machine, except for capacity, has all the operating advantages of the larger Wilson models.

Like all Wilson machines, it is adapted both to heavy currents and large diameter electrodes for rapid depositing of metal, and also to a short arc with close control for strength welding and repair work. By setting the dial pointer on the control panel, and adjusting the open circuit voltage by means of the field rheostat, any desired current value can be obtained. The generator is self-excited, and its commutator is always the coolest part of the machine. As a result of a properly proportioned reactance, which automatically steadies the arc under all welding conditions, the arc is easy to start and easy to maintain. As the current rises only slightly on short circuit, the possibility of the electrode sticking to the metal is minimized.

Wilson type 100-ampere machines are available in electric motor driven, gasoline engine driven and belt driven units. Each machine has a capacity of 30 to 125 amperes, and, the manufacturers state, is capable of turning out fast work with electrodes up to 5/32 inch in diameter.

NATIONAL CORK PRODUCTS ISSUES NEW CATALOG

National Cork Products, Inc., Detroit, Mich., is issuing a new catalogue which specifies the various gaskets and other merchandise which they manufacture. Among the new items included in the catalogue are cork cloth stripping in 100-foot rolls, fender felt and window channel material.

Meet the Engineers

TO acquaint its readers with the important, but unsung, members of the automotive fraternity—the engineers who design and build the nation's cars—Automotive Daily News is publishing a series of brief biographies of the engineers of companies producing automobiles, automotive equipment, parts and accessories. These biographies will cover the training and experience of leading engineers and their outstanding contributions to the progress of our industry.

LEE M. WILEY, chief engineer of the Delta Electric Company of Marion, Ind., has had long and varied experience in the industry.

Born on a Hoosier farm, his boyhood was spent in experimenting and reading along electrical and mechanical lines. Besides several technical courses he also became well versed in bookkeeping and cost work, time study and other divisions of manufacturing procedure. This knowledge has proved invaluable as an aid in designing practical articles which are economical to manufacture.

A diversified training was secured as he grew older, and much valuable experience gained in work at the Rutenber Motor Company and the Indiana Tfuck Corporation, both of which were situated in Marion and a short distance from the farm on which he was raised.

Later, after completing his schooling, Mr. Wiley became chief designer of motors and transmissions of the Crow Motor Company. The war then interrupted this work and he joined the ordnance department, where his work was connected with munitions, airplanes and tanks. After the war, Mr. Wiley became chief tool engineer of the Maxwell Motor Company, in charge of routing, time study and designing.

He then formed and operated his own engineering establishment for a period of ten years, designing and building special automatic machinery and tools, and developing and testing small electrical and mechanical units, of which 75 per cent. were for the automotive field.

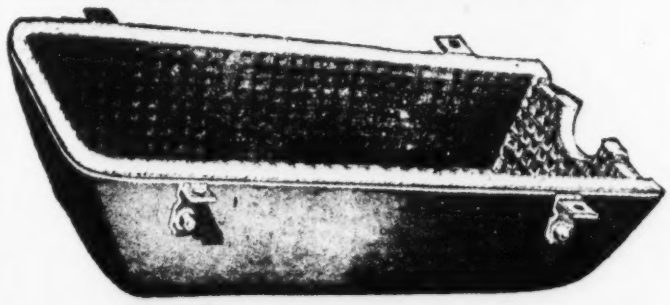
About three years ago Mr. Wiley became connected with the Delta Electric Company as chief engineer in charge of designing, methods and time study.

Products of this company being lamps, switches and wiring harness for automobiles and airplanes, as well as other portable electric devices for the general trade, Mr. Wiley was able to bring his knowledge and experience into the Delta organization to great advantage.

He is, no doubt, best known to the industry for the switches which he has designed, as they have been unusually successful in heavy duty work.

Mr. Wiley also was instrumental in designing the Buddy flashlight lantern, and a number of other devices directly connected with the automotive field and some in general electrical lines.

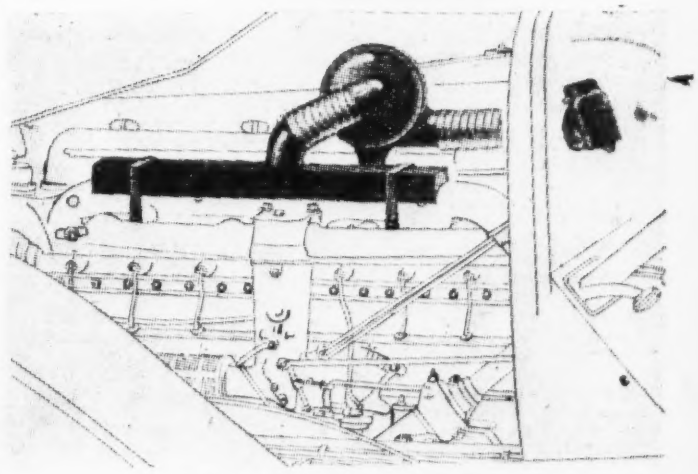
Weidenhoff Markets Walcott Wintercoat



Walcott Wintercoat showing insulating lining

Joseph Weidenhoff, Inc., Chicago, Ill., is marketing the Walcott Wintercoat. This device consists of an air-tight metal cover lined with heat retaining material. The cover is installed over the regular crankcase and provides for an insulated dead air space between the crankcase and the cover.

Mitchell Specialty Co. Now Makes Superheater



Typical Superheater Installation

The Mitchell Specialty Company, Holmesburg, Philadelphia, Pa., is now making an electric blower, hot air, automobile heater, known as the Superheater.

The heater consists of an asbestos covered stove which is mounted on the exhaust manifold. Fresh air is drawn through the stove and forced by means of a motor driven blower through the manually adjustable register which is mounted in the front passenger compartment.

A rear compartment heater is also available. This auxiliary heater is finished to match the front compartment equipment. With the auxiliary heater a dash control is included which permits separate operation of the rear heater.

Superheater stoves are manufactured for individual makes of cars and a universal model is available which is adaptable to a large number of cars.

The standard models are finished in baked enamel and are priced at $17.50, $22.50 and $30.

Nickel-plated heaters with chromium-plated registers can be obtained at an extra charge of $7.50.

The rear heater costs $10 extra.

W. H. TALBERT DIES

Waterloo, N. Y., Aug. 14.—William H. Talbert, superintendent of the finishing department of the Waterloo Mills, Inc., manufacturer of automobile fabrics for the past twenty-two years, died suddenly at his summer home on Lake Cayuga yesterday. He was born in West Canaan, N. H., forty-five years ago and had been identified with the local concern since 1908.

MOONEY SEES TIME RIPE FOR REBUILDING FOREIGN MARKETS

(Continued from Page 1)

values than at any time within the last fifteen years. All this must be done, furthermore, in a world whose purchasing power has been seriously cut by the downward economic curve of the last year.

"As to automotive exports—I believe there soon will be a slow trend upward. The world needs motor cars and motor trucks as much as it has ever needed them. The vehicles already in use are wearing out, and new and more pressing needs are arising daily on every hand. Even with the tariff reprisals and the development of the automobile industries of other countries, no nation is yet building automobiles as well or as economically as the United States."

FORD TO MOVE TRIESTE CAR FACTORY TO GENOA

New York, Aug. 14.—Cable advices from Rome contain the announcement that the Ford Motor Company's assembly plant at Trieste will be transferred next month to Genoa, where the company acquired ground for increasing its establishment in Italy before the new Italian tariff law practically excluded foreign motor cars. The change is being made to reduce transportation charges from Barcelona, one of Ford's European distribution centers.

C. I. T. Car Financing 50% of Its Total Business

NEW YORK, Aug. 14.—Operations of Commercial Investment Trust Corporation during the first six months reflected the recession in general business and particularly in the automobile market by a decrease of 21.8 per cent. in volume of financing and of 27 per cent. in common share earnings from the high mark established last year, although business was maintained at levels substantially above all other preceding years.

Net bills and accounts purchased during the first half year totaled $207,204,728, against $265,106,369 in the like period of last year and $129,865,493 in 1928.

Net income before preferred dividends totaled $4,738,683, a new high record and compared with $4,042,116 in 1929, a gain of 17 per cent. However, the elimination of interest charges through the refinancing program carried out last fall when volume of bank borrowings was sharply reduced by proceeds from the sale of 400,000 shares of preference stock and 250,000 shares of common stock, accounts for the larger earnings reported before dividends.

After preferred dividends, which totaled $1,534,741 for the half year, against $391,224 in 1929, balance for common was $3,203,942, equal to $1.49 a share on the 2,139,781 common shares outstanding on June 30. In 1929, balance after preferred dividends was $3,650,892, equal, after adjustments for 2½ for 1 split in October, 1929, and for stock dividends paid during the year, to $2.08 a share on a comparable basis on stock outstanding June 30, 1929.

Decrease in corporation's volume of business resulted from recession in both wholesale and retail automobile sales. C. I. T.'s domestic financing in this field aggregated $106,161,364, or 50.46 per cent., of total volume. Although no comparative figures for the first half of 1929 are available, the approximate falling off in automotive business is indicated by the decrease in retail and wholesale automotive paper outstanding on June 30 last, to $101,015,656 from $127,748,752 a year previous. All other industrial receivables, however, increased to $67,447,364 from $60,288,823 in June, 1929.

In addition to the increased volume of business achieved outside the automobile field, corporation's profits during the current year were aided by an extensive program of economies in operation set in effect late last fall, with the result that overhead expenses have been sharply curtailed.

The corporation also benefited from wide expansion of branch offices carried out principally during the first six months of 1929, when branches within the United States were increased from around 100 to 134 and foreign service also was substantially broadened. With the initial expenses of this expansion absorbed during last year, the corporation has delayed any further wide extension of its branch facilities and has concentrated efforts on strengthening the operating basis of the new units.

Comparison of the operating results of the first six months of 1930 with the similar periods of the preceding six years is shown in the following table:—

	Volume.	Net Profits.
1930.....	$207,204,728	$4,738,683
1929.....	265,106,369	4,042,116
1928.....	129,865,493	2,246,590
1927.....	90,019,434	1,288,353
1926.....	111,049,753	1,976,567
1925.....	69,800,404	1,390,951
1924.....	58,308,057	987,915

Forty-Three Out of Fifty Companies Report Profits

(Continued from Page 1)

$105,932,428 was accounted for by General Motors.

The thirty-two accessory, parts and equipment companies that operated at a profit reported net earnings of $29,489,112, from which were deducted the losses of $5,812 by Mullins, $176,574 by Moto Meter and $884,288 by Continental Motors.

Goodyear was the only one of the three rubber companies to show a profit, its net income amounting to $5,592,309. Losses of $875,180, and $2,797,403 were reported by Goodrich and U. S. Rubber, respectively.

Aggregate earnings of the passenger car and truck companies showed a decline of 39 per cent. from the first six months of last year, which was the record-breaking period for all time, while the accessory and equipment group showed a decline of 41 per cent. The $119,676,150 for the passenger car and truck group compared with $197,306,360 a year ago, while the $28,422,438 net total for the accessory group compared with $48,418,162 a year ago.

Earnings in the second quarter in both groups of companies showed substantial increases over the first quarter of the year. The second period net income for the passenger car and truck group amounted to $68,678,793, as compared with $49,136,639 in the first three months, a gain of 37 per cent. In this comparison all twelve companies are not used, some of them not having reported their quarterly earnings. The same thing holds in the comparison of quarterly earnings of the accessory makers, as shown in the accompanying tabulation. The accessory net for the second quarter was $13,659,304, as compared with $11,282,604 in the first period, a gain of 21 per cent.

In the following tabulation of automotive earnings for the first half year, the first half of the fiscal year of companies are used in cases where the fiscal year does not conform to the calendar:—

SIX MONTHS

PASSENGER CAR AND TRUCK MANUFACTURERS

	1930	1929	2d Quarter 1930	1st Quarter 1930
Studebaker .....$	2,567,317	$ 11,183,379	$ 1,075,180	$ 1,492,137
White	1,048,000	1,404,000	Not available	Not available
Brockway	212,335	548,451	Not available	Not available
Hudson	3,392,012	10,521,512	1,075,067	2,316,945
Reo	*349,397	1,636,358	*173,961	*175,437
General Motors ...	105,932,428	151,860,310	63,386,768	42,136,639
Mack	1,900,633	3,911,128	1,409,924	490,709
Federal	191,458	315,771	Not available	Not available
Graham-Paige	*880,960	1,341,711	*391,480	*489,480
Yellow T. & C.	1,437,863	859,659	1,332,019	105,844
Hupp	509,053	2,831,382	442,304	66,749
Nash	3,715,498	10,742,199	1,932,896	1,782,512
Net totals .....$	119,676,150	$197,306,360	$68,678,793	$49,136,639

ACCESSORY, PARTS AND EQUIPMENT MANUFACTURERS

National Acme ....$	301,151	$ 1,520,419	$ 88,039	$ 215,112
Thompson Products.	399,036	760,771	196,856	202,180
Link Belt	1,306,199	1,515,932	655,895	650,304
Ainsworth Mfg.	336,187	698,756	189,771	146,416
Motor Wheel	980,607	4,432,998	386,171	594,435
Gemmer	270,834	296,696	Not available	Not available
Briggs & Stratton..	622,845	812,966	321,804	301,041
Mullins Mfg.	* 5,812	341,700	23,704	* 29,516
Packard Electric ...	81,333	293,041	Not available	Not available
Kelsey-Hayes	1,803,228	1,975,779	Not available	Not available
Timken-Detroit	655,427	830,703	Not available	Not available
Marlin-Rockwell ...	682,276	1,402,014	306,054	76,222
McQuay-Norris	300,040	456,000	Not available	Not available
Noblitt-Sparks	171,792	220,600	Not available	Not available
General Parts	104,963	131,939	61,019	43,944
Moto Meter	*176,574	Not available	*119,179	* 57,395
Continental Motors.	*884,288	582,418	Not available	Not available
L. A. Young Spring.	1,080,654	1,524,325	563,769	516,885
Clark Equipment ..	522,716	Not available	246,862	275,854
Bohn Al. & Brass..	688,766	1,781,579	293,880	395,386
Campbell, Wyant ..	574,000	1,061,823	245,236	328,764
Ross Gear & Tool..	256,948	436,336	167,551	89,397
E. G. Budd Mfg. ...	408,211	Not available	297,803	110,408
Budd Wheel	925,132	1,216,696	511,519	413,613
Briggs	3,531,803	2,422,697	2,771,066	760,737
American Chain ...	1,185,215	1,034,029	Not available	Not available
Motor Products	602,239	1,729,431	370,220	232,019
Timken Roller	6,120,023	8,449,198	3,106,659	3,013,364
Fedders Mfg.	132,977	263,812	Not available	Not available
Borg-Warner	2,375,371	4,554,427	1,277,560	1,097,811
Eaton Axle & Spring	1,385,630	2,060,000	373,392	314,750
Formica Insulation.	185,454	495,379	93,630	91,924
Murray Corp.	743,043	1,632,676	447,850	295,193
Midland Steel	1,267,996	2,348,188	568,023	699,973
Spicer Mfg.	417,943	1,552,824	214,150	203,793
Net totals .....$	28,422,438	$ 48,418,162	$13,659,304	$11,282,604

AUTOMOBILE TIRE MANUFACTURERS

Goodyear .....$	5,592,309	$ 12,633,865	Not available	Not available
Goodrich	*875,180	5,070,518	509,966	*1,385,146
U. S. Rubber	*2,797,403	568,641	Not available	Not available
Net totals .....$	1,919,726	$ 18,273,024	$ 509,966	*$ 1,385,146

*Loss.

OTHER FINANCIAL NEWS

CHECKER CAB MFG.

Checker Cab Manufacturing Corporation reports for six months ended June 30, 1930, net profit of $500,074 after charges and taxes, equivalent to $1.33 a share on 375,000 no par shares of stock. This compares with $2,720,667 or $7.25 a share in first half of 1929.

Morris Markin, president, said: "The prospect of improved earnings for the balance of the year is favorable. Orders for a substantial number of cabs, mainly for cash, have been received for delivery during the third quarter."

PITTSBURGH SCREW

The Pittsburgh Screw and Bolt Corporation reports for the six months ended June 30, 1930, net profit of $1,249,479, after depreciation, Federal taxes, interest, etc., equivalent to 83 cents a share on 1,500,000 no-par shares of capital stock. This compares with $1,668,476, or $1.11 a share, on 1,498,983 shares in the first half of 1929.

Net profit for the quarter ended June 30 amounted to $470,716, after above charges, equal to 31 cents a share, comparing with $778,763, or 52 cents a share, in the preceding quarter.

SPARKS-WITHINGTON

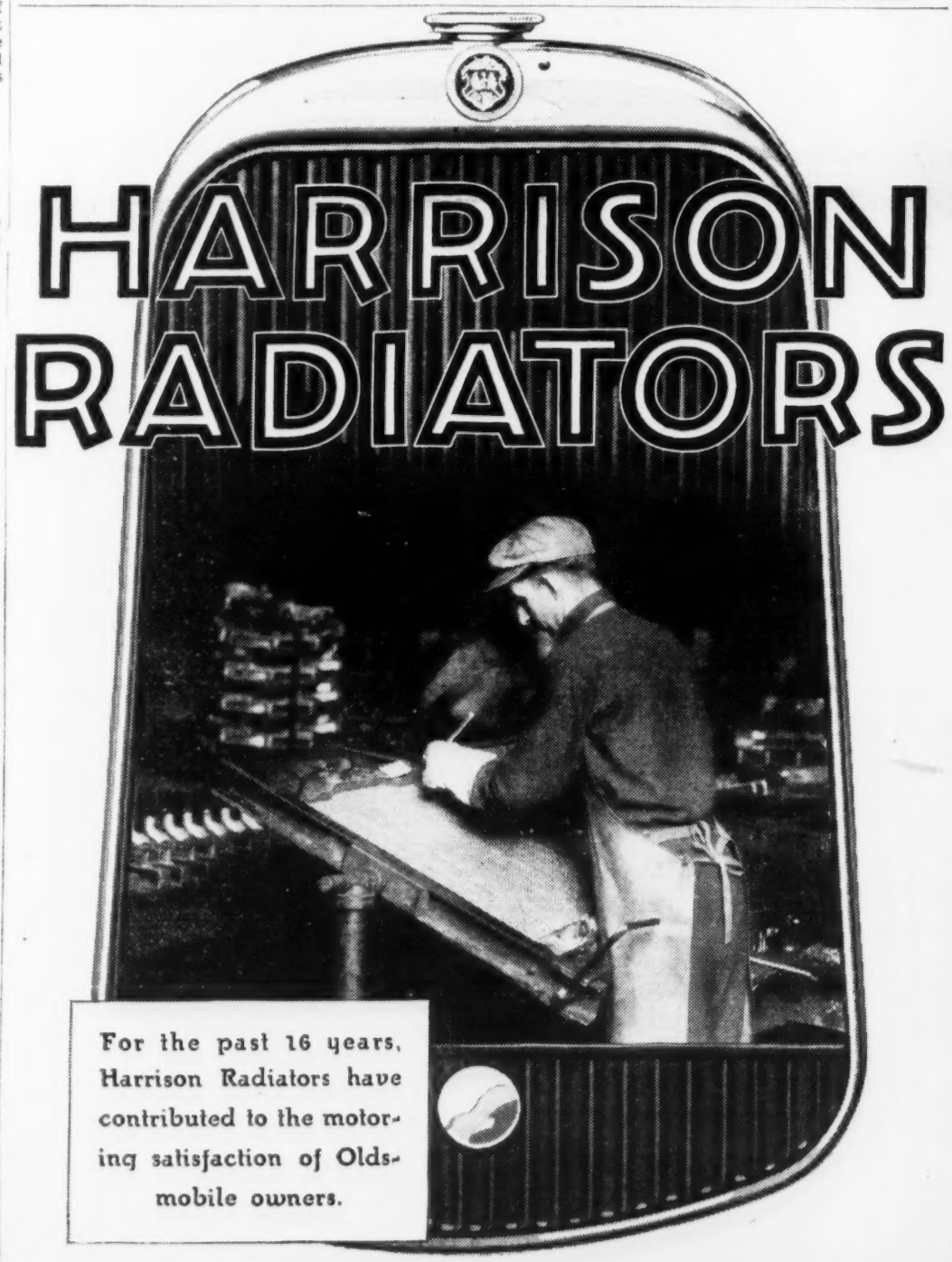
Special meeting of stockholders of Sparks-Withington Company has been called for September 13, to act on proposal to acquire assets and business of Cardon Phonocraft Corporation, manufacturers of radio tubes. Stockholders of Cardon will vote on proposal at a special meeting on September 15.

WESTON ELECTRICAL

Weston Electrical Instrument Corporation reports for the six months ended June 30, 1930, net profit of $448,884 after depreciation, Federal taxes, etc., equivalent under the participating provisions of the shares, to $2.65 a share on 50,000 no-par shares of class A stock and $2.15 a share on 146,600 shares of no-par common stock. This compares with $461,922, or $2.49 a share, on 65,000 shares of class A and $1.99 a share on 150,000 shares of common stock in the first half of 1929.

Net profit for the quarter ended June 30, amounted to $193,722 after above charges, equal to $1.17 a share on 50,000 shares of Class A and 92 cents a share on 146,600 shares of common, comparing with $255,162, or $1.48 a share on 50,000 Class A shares and $1.23 a share on 146,600 common shares in the preceding quarter and $232,244, or $1.25 a share on 65,000 class A shares and $1 a share on 150,000 common shares in June quarter of previous year.

CLASSIFIED ADVERTISEMENTS IN THE AUTOMOTIVE DAILY NEWS BRING RESULTS


HARRISON
RADIATORS
For the past 16 years, Harrison Radiators have contributed to the motoring satisfaction of Oldsmobile owners.